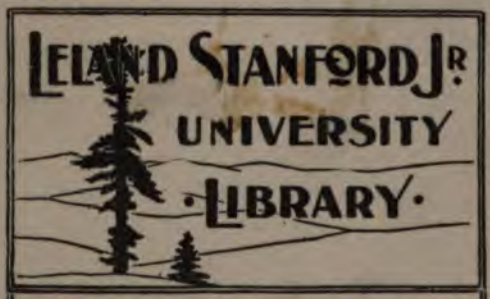

Dec 28, 1896
Published

David S. Jordan
Pres.

Acrotus willoughbyi	Vol.7,No.3,p.179,July	1921	San Pedro Bay
Trichiurus lepturus	Vol.7,No.3,p.179,July	1921	Long Beach
Phanerodon stripes	Vol.7,No.4,p.270,	1921	San Pedro Market
Sebastodes eos	Vol.7,No.4,p.270	1921	San Clemente
Sebastodes gilli	Vol.7.No.4.p.270	1921	San Pedro Markets

Examined by the State Fisheries

Laboratory. (Miss F. Thompson)

Species	Reference to "California Fish and Game" Magazine.	Locality.
Auxis thazard	Vol.4, No.4, p.183, Oct.1918 " 5, " 4, p.200, Oct.1919	San Pedro San Pedro
Tetragonurus cuvieri	Vol.5, No.2, p.94 Apr.1919	Catalina Isld.
Stylophthalmus paradoxus	Vol.5, No.2, p.95, Apr.1919	Off SouthernCalifornia
Citharichthys xanthostigma	Vol.5, No.2, p.95, Apr.1919	Oceanside and San Diego
Exonautes rondeletii	Vol.5, No.2, p.95, Apr.1919	150 miles off San Diego.
Upeneus dentatus	Vol.5, No.3, p.156, July1919	Encinitas & Long Beach
Alosa sapidissima	Vol.5, No.3, p.158, July 1919	Seal Beach.
Anoplopoma fimbria	Vol.5, No.3, p.158, July 1919	San Pedro Bay.
Luvarus imperialis	Vol.5, No.4, p.203, Oct.1919	Catalina Island.

Brama raii	Vol.5,No.4,p.203,Oct,1919	San Pedro Bay.
Cololabis saira	Vol.5,No.4,p.203,Oct.1919	San Diego
Macrorhamphosus hawaiiensis	Vol.6,No.1,p.32 Jan.1920	Catalina Island
Elagatis bipinnulatus	Vol.6,No.1,p.33, Jan.1920	Cape San Lucas
Etrumeus micropus	Vol.6,No.1,p.33, Jan.1920	San Pedro Bay
Idiacanthus antrostomus	Vol.6,No.1,p.33, Jan.1920	Catalina and Cortez Bank.
Lophotes cepedianus	Vol.6,No.1,p.34, Jan.1920	Long Beach
Nematonurus acrolepis	Vol.6,No.2,p.83, Apr.1920	Monterey
Argentina sialis	Vol.6,No.2,p.87, Apr.1920	Huntington Beach
Lycodopsis pacificus	Vol.6,No.2,p.87, Apr.1920	Huntington Beach
Icosteus aenigmaticus	Vol.7,No.2,p.179 July,1921	Monterey Bay

U. S. COMMISSION OF FISH AND FISHERIES,

JOHN J. BRICE, Commissioner.

A CHECK-LIST

OF THE

FISHES AND FISH-LIKE VERTEBRATES

OF

NORTH AND MIDDLE AMERICA.

BY

DAVID STARR JORDAN, PH. D.,
President of Leland Stanford Jr. University and of the California Academy of Sciences,

AND

BARTON WARREN EVERMANN, PH. D.,
Ichthyologist of the United States Fish Commission.

Extracted from Report of Commissioner for 1895. Appendix 5, Pages 207 to 534.
Actual Date of Publication, December 28, 1896.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1896.

Crayracion Klein, 1777. Bleeker makes type
C. laevissimus Klein = "J. eperuglen or very
near it" Atlas, V, 65, 1865.
and an Ovoides. But C. laev. is J. lagocephalus. see Hall
Lecodon Sw = Lersomers Sw. proec. = Chelonodon B.
ai Colaplis
Type J. marmoratus = J. cutcutia Ham Buch. = Tetrod
Bleeker makes T. testudineus L. not Bloch type
Tetraodon, p. 59. This seems right as it w
Amoena 1749-1769 species first called Tetrodon by
Hoff when in 1757 Linnaeus
Planchon Cantor = Ephippus Cuv, 1829. orbis
Ephippus Cuv. 1817 = Scalophagus 1829 argus ✓
Platyglossus Klein type marginatus. Bleeker
Atlas 1, 108, 1862
Serranus type fasciatus ~ stromateus

Otolithes not us.

5.—A CHECK-LIST OF THE FISHES AND FISH-LIKE VERTEBRATES OF NORTH AND MIDDLE AMERICA.

BY

DAVID STARR JORDAN, PH. D.,
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PREFACE.

The present paper is a list of all the species of fishes and fish-like vertebrates thus far recorded as occurring in American waters north of the Isthmus of Panama. For the sake of greater completeness the marine fishes of Guiana, Ecuador, and the Galapagos Islands are included, as all of these are sure, sooner or later, to be found within our limits. In like manner the few species known from Kamchatka are included as part of the fauna of the Alaskan Sea.

The sequence and nomenclature is that of Jordan & Evermann, "Fishes of North and Middle America," a descriptive catalogue forming Bulletin 47 of the United States National Museum. Of this work, Volume I, *Branchiostomatidæ* to *Priacanthidæ*, is now printed, but not published; Volume II is still in manuscript. It is expected that both will be published within the present year. The differences between the nomenclature given in this check-list and that of the work in question arise from the incorporation of new material into the one work after the printing of the other.

In both these memoirs, the rules of nomenclature as laid down by the American Ornithologists' Union have been followed implicitly, with two exceptions. The first of these exceptions concerns Canon XVII, 2, which gives to specific names applied to males precedence over names used for females, when the two occur on the same page. In such cases of synchronous names we have awarded priority to the name standing first on the page, regardless of other considerations. The other exception is the rule abandoning a name (as *Scaphirhynchus*,

Xiphidion, *Canthidermis*, etc.) when a prior generic name is of like etymology and of nearly the same spelling (as *Scaphorhynchus*, *Xiphidium*, or *Acanthoderma*). We regard all generic names as different unless originally spelled alike, and the original orthography (misprints aside) is in all cases retained.

With each species is given its geographical range, so far as known, and a reference to the first description under the specific name adopted by us. The locality following this reference is the type locality of the species. The name in parenthesis following the reference to the generic name is that of the species taken by the describer as the type of the genus.

At the end of the catalogue of native species will be found a list of the principal introduced species, especially those which have become well established in American waters.

The authors desire to acknowledge their indebtedness to Dr. Theodore Gill for valuable assistance in various ways in the preparation of this catalogue. His wide acquaintance with zoological literature has enabled them to complete and verify many references which otherwise might have remained incomplete or erroneous.

Thanks are also due Mr. Barton A. Bean for assistance in the verification of references.

DAVID STARR JORDAN.
BARTON WARREN EVERMANN.

PALO ALTO, CALIFORNIA, *May 21, 1896.*

AMPHIOXIDES Rich. 1895
A. pelagicus (Günther) 1889.

B. caribaeum Sund.
St Thomas

B. floridae Hubbs. Occ. Papers
Univ. Mich. 7. no 106. Jan 1922
Tampa Bay. (Pensacola; Cape Romano.
St Martins Reef. Snapper Banks)

B. virginiae Hubbs, l.c.
Sewells Point. Chesapeake Bay
Atlantic Coast generally to Florida

B. bermudae Hubbs. P.9.
Bermuda.

B. elongatum Sundevall.
Galapagos. Valparaiso
Sundevall. 1853.

CHECK-LIST OF THE FISHES AND FISH-LIKE VERTEBRATES OF NORTH AND MIDDLE AMERICA.

Class I. LEPTOCARDII. The Lancelets.

Order A. AMPHIOXI. The Cirrostomes.

Family I. BRANCHIOSTOMATIDÆ. The Lancelets.

Genus 1. BRANCHIOSTOMA Costa.

Branchiostoma Costa, Cenni Zoologici Napol., 49, 1834 (*lubricum* = *lanceolatum*).

1. **Branchiostoma lanceolatum** (Pallas). *European Lancelet; Amphioxus.*
   Mediterranean; southern England; Scandinavia; Chesapeake Bay.
   Limax lanceolatus Pallas, Spicilegia Zool., x, 19, 1774, Cornwall.

2. **Branchiostoma caribæum** Sundevall. *West Indian Lancelet.*
   Atlantic coast of ~~America from Beaufort, N. C.~~, to the mouth of the La Plata; abundant off the ~~Carolina coast and in localities in Florida (Port Tampa)~~, Jamaica, Brazil, etc. West Indies
   Branchiostoma caribæum Sundevall, Ölfers, Vet. Akad. Förhandl. 1853, 12, St. Thomas; ~~Rio Janeiro~~. = B. platæ Hubb. 10. La Plata.

3. **Branchiostoma californiense** Gill. *California Lancelet.*
   Pacific coast of North America from San Diego Bay southward.
   Branchiostoma californiensis Gill, in Andrews, Studies Biol. Lab. Johns Hopkins Univ., v, 241, 1893, San Diego, California.

Genus 2. ASYMMETRON Andrews. Epigonichthys Peters.

Asymmetron Andrews, Studies Biol. Lab. Johns Hopkins Univ., v, 237, 1893 (*lucayanum*).

4. **Asymmetron lucayanum** Andrews. *Bahama Lancelet.*
   ~~Bemini and Nassau~~, Bahamas. i Brazil
   Asymmetron lucayanum Andrews, Studies Biol. Lab. Johns Hopkins Univ., v, 237, 1893, Bemini, Bahama Islands.

Class II. MARSIPOBRANCHII. The Lampreys.

Order B. HYPEROTRETI. The Hagfishes.

Family II. HEPTATREMIDÆ. The Borers.

Genus 3. POLISTOTREMA Gill. ? Eptatretus Eptatretidae

Polistotrema Gill, Proc. U. S. Nat. Mus. 1880, 30 (*dombey*).

5. **Polistotrema stouti** (Lockington). *California Hagfish; Lamperina.*
   Coast of California; Monterey.
   Bdellostoma stouti Lockington, Amer. Nat. 1878, 793, Eel River, California.

Family III. MYXINIDÆ. The Hagfishes.

Genus 4. MYXINE Linnæus.

Myxine Linnæus, Systema Naturæ, ed. x, 650, 1758 (*glutinosa*).

6. **Myxine glutinosa** Linnæus. *Hagfish; Borer.*
   North Atlantic, on both coasts. Not abundant in America; south to Delaware.
   Myxine glutinosa Linnæus, Syst. Nat., ed. x, 650, 1758, Atlantic Ocean.

Order C. HYPEROARTII. The Lampreys.

Family IV. PETROMYZONIDÆ. The Lampreys.

Genus 5. BATHYMYZON Gill.

Bathymyzon Gill, Proc. U. S. Nat. Mus. 1883, 254 (*bairdii*). ? = new G ?

7. Bathymyzon bairdii Gill.

Gulf Stream.

Petromyzon (*Bathymyzon*) *bairdii* Gill, Proc. U. S. Nat. Mus. 1883, 254, Gulf Stream at lat. 49° N., in 547 fathoms.

Genus 6. PETROMYZON (Artedi) Linnæus.

Petromyzon (Artedi) Linnæus, Systema Naturæ, ed. x, 230, 1758 (*marinus*).

8. Petromyzon marinus Linnæus. *Great Sea Lamprey; Lamprey Eel.*

Atlantic coasts of Europe and North America, southward to Chesapeake Bay.

Petromyzon marinus Linnæus, Syst. Nat., ed. x, 230, 1758, European seas; after Artedi.

8a. Petromyzon marinus unicolor (DeKay).

Lakes of northern and central New York.

Ammocœtes unicolor DeKay, N. Y. Fauna: Fishes, 383, 1842, Lake Champlain.

Genus 7. ICHTHYOMYZON Girard. *River Lampreys.*

Ichthyomyzon Girard, Pac. R. R. Surv., x, 381, 1858 (*argenteus*).

9. Ichthyomyzon concolor (Kirtland). *Silvery Lamprey.*

Great Lakes, Upper Mississippi Valley, and Rainy River.

Ammocœtes concolor Kirtland, Bost. Jour. Nat. Hist., III, 1840, 473, with plate, Mahoning and Scioto rivers, Ohio.

10. Ichthyomyzon castaneus Girard.

Mississippi Valley.

Ichthyomyzon castaneus Girard, Pac. R. R. Surv., x, 381, 1858, Galena, Minn.

Genus 8. ENTOSPHENUS Gill.

Entosphenus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 331 (*tridentatus*).

11. Entosphenus tridentatus (Gairdner).

Pacific Coast of America, Unalaska to southern California.

Petromyzon tridentatus Gairdner, in Richardson, Fauna Bor.-Am., 293, 1836, Falls of the Walamet (now Willamette) River, Oregon.

Genus 9. LAMPETRA Gray. *Brook Lampreys.*

Lampetra Gray, Proc. Zool. Soc. Lond. 1851, 235 (*fluviatilis*).

12. Lampetra aurea (Bean).

Yukon River and streams of Alaska and Kamchatka.

Ammocœtes aureus Bean, Proc. U. S. Nat. Mus. 1881, 159, Yukon River

13. Lampetra spadicea Bean.

Guanajuato, Mexico.

Lampetra spadicea Bean, Proc. U. S. Nat. Mus. 1887, 374, Guanajuato.

14. Lampetra cibaria (Girard).

Pacific slope of America, from Fraser River to the Sacramento.

Ammocœtes cibarius Girard, Pac. R. R. Surv., x, 383, 1858, Puget Sound.

15. Lampetra wilderi (Gage). *Small Black Lamprey; Pride; Prick.*

Western New York to Iowa, in tributaries of the Great Lakes and the Mississippi.

Ammocœtes wilderi Gage, in Wilder Quarter-Century Book, 436, 1893, Cayuga Lake, New York.

Oceanomyzon wilsoni Fowler
Open Atlantic,
Proc. 1908.

Ce. cunnitholicus. Pallas

L. aepypteria Abbott = L. wilsoni.
fide Fowler.

Class III. PISCES. The Fishes.

Subclass SELACHII. The Sharks and Skates.

Order D. DIPLOSPONDYLI. The Notidanoid Sharks.

Family V. CHLAMYDOSELACHIDÆ. The Frilled Sharks.

Genus 10. CHLAMYDOSELACHUS Garman.

Chlamydoselachus Garman, Bull. Essex Inst., Jan. 17, 1884, 47 (*anguineus*).

16. Chlamydoselachus anguineus Garman.

Seas about Japan; also off Madeira; not certainly American.
Chlamydoselachus anguineus Garman, Bull. Essex Inst., Jan. 17, 1884, 47, off Japan.

Family VI. HEXANCHIDÆ. The Cow Sharks.

Genus 11. NOTORHYNCHUS Ayres.

Notorhynchus Ayres, Proc. Cal. Ac. Sci., I, 1856, 72 (*maculatus*).

17. Notorhynchus maculatus Ayres.

Pacific coast of United States from Monterey northward to Washington.
Notorhynchus maculatus Ayres, Proc. Cal. Ac. Sci., I, 1856, 72, San Francisco.

Genus 12. HEXANCHUS Rafinesque.

Hexanchus Rafinesque, Caratteri, 14, 1810 (*griseus*).

18. Hexanchus corinus Jordan & Gilbert. *Shovel-nosed Shark.*

Monterey Bay to Puget Sound; not common.
Hexanchus corinus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 352, Neah Bay, Washington, and Soquel, California.

19. Hexanchus griseus (Gmelin). *Cow Shark; Caña-Bota.*

Deep water, Mediterranean to the west coast of Scotland; frequently taken in Cuba (Poey).
Squalus griseus Gmelin, Syst. Nat., I, 1495, 1788, Mediterranean; after Broussonet.

Order E. ASTEROSPONDYLI. The Typical Sharks.

Suborder PROARTHRI. The Cestraciont Sharks.

Family VII. HETERODONTIDÆ. The Bullhead Sharks.

Heterodontus.

Genus 13. GYROPLEURODUS Gill.

Gyropleurodus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 489 (*francisci*).

20. Gyropleurodus francisci (Girard). *Bullhead Shark.*

Coast of California; abundant south of Point Conception.
Cestracion francisci Girard, Proc. Ac. Nat. Sci. Phila. 1854, 196, Monterey.

21. Gyropleurodus quoyi (Fréminville).

Galapagos Islands.
Cestracion quoyi Fréminville, Mag. Zool. 1840, pl. 3, Galapagos Islands.

Suborder GALEI. The True Sharks.

Family VIII. SCYLLIORHINIDÆ. The Cat Sharks.

Catulus, Valmont.

Genus 14. SCYLLIORHINUS Blainville. *Roussettes.*

Scylliorhinus Blainville, Journ. Phys. 1816, 263 (*canicula*, etc.).

22. Scylliorhinus profundorum Goode & Bean.

Deep water, North Atlantic.
Scylliorhinus profundorum Goode & Bean, Oceanic Ichthyology, 17, 1896, Gulf Stream.

Genus 15. CATULUS Smith.

Catulus Andrew Smith, Proc. Zool. Soc. Lond. 1837, 85 (*stellaris*).

Subgenus CATULUS Smith.

23. Catulus xaniurus Gilbert.

Pacific Coast of southern California.

Catulus xaniurus Gilbert, Proc. U. S. Nat. Mus. 1891, 540, off southern and lower California, in 184 to 684 fathoms.

24. Catulus brunneus Gilbert.

Gulf of California, in deep water.

Catulus brunneus Gilbert, Proc. U. S. Nat. Mus. 1891, 542, Gulf of California.

25. Catulus cephalus Gilbert.

Gulf of California and southward, in deep water.

Catulus cephalus Gilbert, Proc. U. S. Nat. Mus. 1891, 541, deep water near the Revillagigedo Islands, Mexico, and in the Gulf of California.

26. Catulus retifer (Garman).

Gulf Stream, in deep water.

Scyllium retiferum Garman, Bull. Mus. Comp. Zool., XI, 233, 1881, off coast of Virginia, in deep water.

Genus

Subgenus CEPHALOSCYLLIUM Gill.

Cephaloscyllium Gill, Ann. Lyc. Nat. Hist. N. Y. 1861, 407 (*laticeps*).

Ceph. laticeps

27. Catulus uter Jordan & Evermann. *Swell Shark.*

Monterey to San Diego; very abundant in Santa Barbara Channel.

Catulus uter Jordan & Evermann, Fishes North and Middle America, 25, 1896, Monterey, San Diego, and Santa Barbara Channel.

Family IX. GINGLYMOSTOMIDÆ. The Nurse Sharks.

Genus 16. GINGLYMOSTOMA Müller & Henle.

Ginglymostoma Müller & Henle, Wiegmann's Archiv, 1837, I, 396.

28. Ginglymostoma cirratum (Gmelin). *Nurse Shark; Gata.*

West Indies and the west coast of Mexico; occasional on our South Atlantic Coast.

Squalus cirratus Gmelin, Syst. Nat., I, 1492, 1788, American seas; after Broussonet.

Family X. PSEUDOTRIAKIDÆ.

Genus 17. PSEUDOTRIAKIS Capello.

Pseudotriakis Capello, Jour. Sci. Math. Phys. Nat. Lisb. 1868, 321 (*microdon*).

29. Pseudotriakis microdon Capello.

Portugal; Amagansett, Long Island.

Pseudotriakis microdon Capello, Jour. Sci. Math., etc., Lisb. 1868, 321, Portugal.

Family XI. GALEIDÆ. The Requiem Sharks.

Genus 18. MUSTELUS Cuvier. Valmont de Bomare,

Mustelus Cuvier, Règne Animal, ed. 1, 128, 1817 (*mustelus* ~~and canis~~).

30. Mustelus lunulatus Jordan & Gilbert. *Gato.*

West coast of Mexico. to San Diego

Mustelus lunulatus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 108, Mazatlan.

Lævis

31. Mustelus ~~canis (Mitchill)~~. *Smooth Hound; Dog Shark; Boca Dulce.*

Cape Cod to Cuba, and in southern Europe.

Squalus canis Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 486, New York.

Pabulus Valmont de Bomare 1768.

San Diego. Norris. Copeia Jan 26 1923.

Cynias Cain.

M. Laevis or M. musculus L.

Genus 19. GALEUS Rafinesque.

Galeus Rafinesque, Caratteri Alcuni Nuovi Generi, 13, 1810 (*mustelus*, etc.; the intended type is apparently *Squalus galeus* L., though that species is not mentioned by name).

Mustelus

32. Galeus dorsalis (Gill).

Panama and neighboring waters, north to the Gulf of California.
Mustelus dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1864, 149, Panama.

33. Galeus californicus (Gill).

California, north to San Francisco.
Mustelus californicus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 148, San Francisco.

Genus 20. RHINOTRIACIS Gill.

Rhinotriacis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 486 (*henlei*).

34. Rhinotriacis henlei Gill.

Coast of California, from Humboldt Bay to Monterey; rather rare.
Rhinotriacis henlei Gill, Proc. Ac. Nat. Sci. Phila. 1862, 486, San Francisco.

Genus 21. TRIAKIS Müller & Henle.

Triakis Müller & Henle, Magazine of Natural History, n. s., II, 1838, 36.

35. Triakis semifasciatum Girard. *Cat Shark; Leopard Shark.*

Cape Mendocino to San Diego; common.
Triakis semifasciatum Girard, Proc. Ac. Nat. Sci. Phila. 1854, 196, Presidio de San Francisco.

Genus 22. GALEORHINUS Blainville. or Eugaleus Gill

Galeorhinus Blainville, Bull. Sci. Philom. 1816, 121 (*galeus*).

36. Galeorhinus zyopterus Jordan & Gilbert. *Oil Shark; Soup-fin Shark.*

Coast of southern California, from San Francisco to Cerros Island; very abundant.
Galeorhinus zyopterus Jordan & Gilbert, Synopsis, 871, 1883, San Pedro, Cal.

Genus 23. GALEOCERDO Müller & Henle.

Galeocerdo Müller & Henle, Plagiostomen, 59, 1838 (*tigrinus*).

37. Galeocerdo ~~tigrinus~~ Müller & Henle. *Tiger Shark; Alecrin; Tigrone.*

Tropical seas; not rare; occasionally northward to Cape Cod and to San Diego.
Galeocerdo tigrinus Müller & Henle, Plagiostomen, 59, 1838, Pondichery.

= Eg. arcticus Gabel

Genus 24. ~~PRIONACE Cantor.~~ Galeus Valmont

Prionace Cantor, Malayan Fishes, 399, 1850 (substitute for *Prionodon*).

38. Prionace glauca (Linnæus). *Great Blue Shark.*

Warm seas, occasionally taken on our coasts; more common in Europe.
Squalus glaucus Linnæus, Syst. Nat., ed. x, 235, 1758, seas of Europe.

Genus 25. CARCHARHINUS Blainville.

Carcharhinus Blainville, Jour. Phys. 1816, 264 (*commersoni*).

Subgenus PLATYPODON Gill.

Platypodon Gill, Ann. Lyc. Nat. Hist. N. Y. 1861, 401 (*menisorrah*).

39. Carcharhinus obscurus (LeSueur). *Dusky Shark.*

North Atlantic; frequently taken on our coast.
Squalus obscurus LeSueur, Journ. Ac. Nat. Sci. Phila. 1818, 223, New York.

40. Carcharhinus platyrhynchus (Gilbert).

Magdalena Bay to Galapagos Islands.
Eulamia platyrhynchus Gilbert, Proc. U. S. Nat. Mus. 1891, 544, Clarion Island; Socorro Island; Magdalena Bay.

41. Carcharhinus falciformis (Bibron). *Cazon de Playa.*
Cuba and neighboring waters.
Carcharias falciformis Bibron, in Müller & Henle, Plagiostomen, 47, 1838, Cuba.

42. Carcharhinus acronotus (Poey).
Cuba.
Squalus acronotus Poey, Memorias, II, 335, 1861, Havana.

43. Carcharhinus perezi (Poey).
Cuba.
Platypodon perezi Poey, Enumeratio, 195, 1875, Cuba.

44. Carcharhinus remotus (Valenciennes).
Martinique.
Carcharias remotus Valenciennes, in Duméril, Hist. Nat. Poiss., I, 374, 1870, Martinique.

45. Carcharhinus henlei (Valenciennes).
Coast of Brazil northward to Guiana.
Carcharias henlei Valenciennes, in Müller & Henle, Plagiostomen, 46, 1838, Guiana.

Subgenus CARCHARHINUS Blainville.

46. Carcharhinus milberti (Müller & Henle).
Cape Cod to Florida; not rare.
Carcharias (*Prionodon*) *milberti* Müller & Henle, Plagiostomen, 38, 1838, New York.

47. Carcharhinus lamiella (Jordan & Gilbert). *Bay Shark.*
San Diego Bay and southward along the Mexican coast.
Carcharias lamiella Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 110, San Diego.

48. Carcharhinus lamia (Rafinesque). *Cub Shark; Requin; Requiem; Lamia.*
Tropical parts of the Atlantic northward to Florida Keys.
Carcharias lamia Rafinesque, Indice d'Ittiol. Sicil., 44, 1810, Sicily; after Lacépède.

49. Carcharhinus platyodon (Poey).
Cuba to Texas.
Squalus platyodon Poey, Memorias, II, 331, 1861, Havana.

50. Carcharhinus fronto (Jordan & Gilbert). *Tiburon.*
Pacific Coast of Mexico.
Carcharias fronto Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 102, Mazatlan.

51. Carcharhinus nicaraguensis (Gill & Bransford). *Tigrone.*
Lake Nicaragua and its outlet, Rio San Juan; abundant.
Eulamia nicaraguensis Gill & Bransford, Proc. Ac. Nat. Sci. Phila. 1877, 190, Lake Nicaragua.

Subgenus ISOGOMPHODON Gill.
Isogomphodon Gill, Ann. Lyc. Nat. Hist. N. Y. 1861, 401 (*oxyrhynchus*).

52. Carcharhinus æthalorus (Jordan & Gilbert).
Mazatlan to Panama.
Carcharias æthalorus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 104, Mazatlan.

53. Carcharhinus limbatus (Müller & Henle). *Caçonetta.*
Tropical seas, north to Florida; a stray specimen taken at Woods Hole, Mass.
Carcharias (*Prionodon*) *limbatus* Müller & Henle, Plagiost., 49, 1838, Martinique.

54. Carcharhinus oxyrhynchus (Müller & Henle).
Surinam
Carcharias oxyrhynchus Müller & Henle, Plagiostomen, 41, 1838, Surinam.

Genus 26. HYPOPRION Müller & Henle.
Hypoprion Müller & Henle, Plagiostomen, 34, 1838 (*macloti*).

55. Hypoprion brevirostris Poey.
West Indies, north to Charleston, South Carolina.
Hypoprion brevirostris Poey, Repertorio, II, 451, tab. 4, 1868, Cuba.

56. Hypoprion signatus Poey.
Cuba.
Hypoprion signatus Poey, Synopsis, 452, 1868, Cuba.

Genus 27. APRIONODON Gill.
Aprionodon Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1861, 411 (*punctatus* = *isodon*).

57. Aprionodon isodon (Müller & Henle).
Atlantic Ocean.
Carcharias isodon Müller & Henle, Plagiostomen, 32, 1838, New York.

Genus 28. SCOLIODON Müller & Henle.
Scoliodon Müller & Henle, Wiegmann's Archiv f. Naturg., I, 398, 1837 (*laticaudus*).

58. Scoliodon longurio (Jordan & Gilbert).
Pacific Coast of Mexico.
Carcharias longurio Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 106, Mazatlan.

59. Scoliodon terræ-novæ (Richardson). *Sharp-nosed Shark; Tiger Shark.*
Cape Cod to Brazil; very common southward along the Atlantic Coast.
Squalus (*Carcharias*) *terræ-novæ* Richardson, Fauna Bor.-Amer., III, 289, 1836, Newfoundland.

Family XII. SPHYRNIDÆ. The Hammer-headed Sharks.

Genus 29. SPHYRNA Rafinesque. Cestracion Klein
~~*Sphyrna*~~ Rafinesque, Indice d'Ittiol. Siciliana, 60, 1810 (*zygæna*).

Subgenus RENICEPS Gill.
Reniceps Gill, Ann. Lyc. Nat. Hist. N. Y., VIII, 1861, 412 (*tiburo*).

60. Sphyrna tiburo (Linnæus). *Shovel-head Shark; Bonnet-head.*
Atlantic Ocean; abundant on our coast from Long Island southward, ranging to China and Mazatlan.
Squalus tiburo Linnæus, Syst. Nat., ed. x, 234, 1758, America.

Subgenus PLATYSQUALUS Swainson.
Platysqualus Swainson, Class. Anim., II, 318, 1839 ("*tiburo*" = *tudes*).

61. Sphyrna tudes (Cuvier).
Gulf of California, West Indies, Mediterranean, and Indian Ocean.
Zygæna tudes Cuvier, in Valenciennes, Mém. Mus., IX, 225, 1822, Nice; after *Pantouflier* of Risso.

Subgenus ~~SPHYRNA Rafinesque.~~

62. Sphyrna zygæna (Linnæus). *Hammer-headed Shark.*
From Cape Cod and Point Conception southward.
Squalus zygæna Linnæus, Syst. Nat., ed. x, 234, 1758, Europe; America.

Family XIII. ALOPIIDÆ. The Thresher Sharks.

Genus 30. ALOPIAS Rafinesque. Vulpecula Valmont.
Alopias Rafinesque, Caratteri di Alcuni Generi, etc., 12, 1810 (*macrurus* = *vulpes*).

63. Alopias vulpes (Gmelin). *Thresher; Fox Shark; Swingle-tail; Long-tail Shark.*
Mediterranean and Atlantic; Pacific Coast.
Squalus vulpes Gmelin, Syst. Nat., I, 1496, 1788, Mediterranean; after Pennant.

V. marina Valmont.

Family XIV. CARCHARIIDÆ. The Sand Sharks.

Genus 31. CARCHARIAS Rafinesque.
Carcharias Rafinesque, Caratteri di Alcuni Nuovi Generi, 10, 1810 (*taurus*).

Subgenus EUGOMPHODUS Gill.
Eugomphodus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 260 (*littoralis*).

64. Carcharias littoralis (Mitchill). *Sand Shark.*
Atlantic Coast between Cape Cod and Cape Hatteras.
Squalus littoralis Mitchill, Am. Monthly Mag., II, 1818, 328, New York.

Family XV. LAMNIDÆ. The Mackerel Sharks.

Genus 32. ISURUS Rafinesque.
Isurus Rafinesque, Caratteri di Alcuni Nuovi Generi, 11, 1810 (*oxyrhynchus*).

Subgenus ISUROPSIS Gill.
Isuropsis Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1862, 409 (*dekayi*).

65. Isurus ~~dekayi (Gill).~~ *Mackerel Shark.* glaucus
Cape Cod to West Indies.
Isuropsis dekayi Gill, Ann. Lyc. N. Y., VII, 1862, 409; after DeKay.

Subgenus ISURUS Rafinesque. J. Eyn's Atwood

66. Isurus oxyrhynchus Rafinesque. *Mackerel Shark; Pesce Tondo; Cane di Mare.*
Mediterranean and neighboring parts of the Atlantic; occasional on Atlantic coast of North America.
Isurus oxyrhynchus Rafinesque, Caratteri, etc., 12, 1810, Palermo

Genus 33. LAMNA Cuvier. *Porbeagles.*
Lamna Cuvier, Règne Animal, ed. I, 126, 1817 (*cornubicus*).

nasus Bonnaterre

67. Lamna ~~cornubica~~ (Gmelin). *Porbeagle; Mackerel Shark.*
North Atlantic and North Pacific.
Squalus cornubicus Gmelin, Syst. Nat., I, 1497, 1788, shores of Cornwall.

Genus 34. CARCHARODON Smith. *Man-eater Sharks.*
Carcharodon Andrew Smith, Proc. Geol. Soc. Lond., V, 86, 1837 (*capensis* = *carcharias*).

68. Carcharodon carcharias (Linnæus). *Man-eater Shark; Great White Shark.*
Temperate and tropical parts of the Atlantic and the Pacific.
Squalus carcharias Linnæus, Syst. Nat., ed. X, 235, 1758, Europe.

Family XVI. CETORHINIDÆ. The Basking Sharks.

Genus 35. CETORHINUS Blainville.
Cetorhinus Blainville, Journ. Phys. 1816, 264 (*gunneri* = *maximus*).

69. Cetorhinus maximus (Gunner). *Basking Shark; Pelerin; Elephant Shark.*
Arctic seas, Portugal, Virginia, and California.
Squalus maximus Gunner, Trondhjem Selskabskr., III, 33, 1765, coast of Norway.

Family XVII. RHINODONTIDÆ. The Whale Sharks.

Genus 36. MICRISTODUS Gill.
Micristodus Gill, Proc. Ac. Nat. Sci. Phila. 1865, 177 (*punctatus*).

70. Micristodus punctatus Gill.
Gulf of California.
Micristodus punctatus Gill, Proc. Ac. Nat. Sci. Phila. 1865, 177, Gulf of California.

= Q. Laurus Raf. Fide Gaiman

6 7. Salmon Shash. at Kadiak.
Monhegan I. Me.

Rhinodon typicus, 1829

Benedig d. 5 Februar

Lucius Bernaterre

Order F. CYCLOSPONDYLI. The Cyclospondylous Sharks.

Suborder CYCLOSPONDYLI.

Family XVIII. SQUALIDÆ. The Dogfishes.

Genus 37. SQUALUS (Artedi) Linnæus.

Squalus (Artedi) Linnæus, Syst. Nat., ed. x, 233, 1758 (includes all sharks).

71. Squalus acanthias Linnæus. *Dogfish; Picked Dogfish; Bonedog; Skittle-dog.*
North Atlantic on both coasts and about Cuba.
Squalus acanthias Linnæus, Syst. Nat., ed. x, 233, 1758, coast of Europe.

72. Squalus sucklii (Girard). *California Dogfish*
Aleutian Islands to Santa Barbara.
Spinax (*Acanthias*) *sucklii* Girard, Proc. Ac. Nat. Sci. Phila. 1854, 196, Fort Steilacoom, Washington.

Genus 38. CENTROSCYMNUS Bocage & Capello.

Centroscymnus Bocage & Capello, Proc. Zool. Soc. Lond. 1864, 263 (*cœlolepis*).

73. Centroscymnus cœlolepis Bocage & Capello.
Coast of Portugal and neighboring parts of the Atlantic; Gloucester, Mass. and Nova Scotia Banks.
Centroscymnus cœlolepis Bocage & Capello, Proc. Zool. Soc. Lond. 1864, 263 Portugal.

Genus 39. ETMOPTERUS Rafinesque.

Etmopterus Rafinesque, Caratteri, etc., 14, 1810 (*aculeatus*).

74. Etmopterus pusillus (Lowe).
Madeira, Cuba, and Cape Verdes.
Acanthidium pusillum Lowe, Proc. Zool. Soc. Lond. 1839, 91, Madeira.

Genus 40. CENTROSCYLLIUM Müller & Henle.

Centroscyllium Müller & Henle, Plagiostomen, 191, 1838 (*fabricii*).

75. Centroscyllium fabricii (Reinhardt).
Greenland seas, Gloucester, and the Nova Scotia Banks.
Spinax fabricii Reinhardt, Dansk. Vid. Selsk. Forh., 1828, III, XVI, Greenland.

Family XIX. SOMNIOSIDÆ. The Scymnoid Sharks.

Genus 41. SOMNIOSUS LeSueur.

Somniosus LeSueur, Jour. Ac. Nat. Sci. Phila. 1818, 222 (*brevipinna*=*microcephalus*).

76. Somniosus microcephalus (Bloch). *Sleeper Shark; Nurse.*
Arctic seas, south to Cape Cod, Oregon, and France.
Squalus microcephalus Bloch & Schneider, Syst. Ichth., 135, 1801, northern seas.

Family XX. ECHINORHINIDÆ. The Bramble Sharks.

Genus 42. ECHINORHINUS Blainville.

Echinorhinus Blainville, Bull. Soc. Philom. 1816, 121 (*spinosus*).

77. Echinorhinus spinosus (Gmelin).
Atlantic coasts of Europe, America, and Africa.
Squalus spinosus Gmelin, Syst. Nat., I, 1500, 1788, "the ocean."

Suborder TECTOSPONDYLI.

Family XXI. SQUATINIDÆ. The Angel Sharks.

Genus 43. SQUATINA Duméril.
Squatina Duméril, Zool. Analyt., 102, 1806 (*angelus*=*squatina*).

78. Squatina squatina (Linnæus). *Monk-fish; Angel-fish; Squato.*
Atlantic and Pacific coasts of the United States southward from Cape Cod and San Francisco; Mediterranean.
Squalus squatina Linnæus, Syst. Nat., ed. x, 233, 1758, coasts of Europe.

Order G. BATOIDEI. The Rays.

Suborder SARCURA. The Thick-tailed Rays.

Family XXII. PRISTIDÆ. The Sawfishes.

Genus 44. PRISTIS Latham.
Pristis Latham, Trans. Linn. Soc., II, 1794, 276 (*pristis*).

79. Pristis zephyreus Jordan & Starks. *Pez de Espada.*
Tropical seas, north to Mazatlan on the Pacific Coast; the West Indies.
Pristis zephyreus Jordan & Starks, Fishes of Sinaloa, 11, 1895, Mazatlan, Mexico.

80. Pristis pectinatus Latham. *Common Sawfish; Pez Sierra; Pez de Espada.*
Tropical seas; north to West Indies and Florida.
Pristis pectinatus Latham, Trans. Linn. Soc., II, 1794, 278, "in the ocean."

Family XXIII. RHINOBATIDÆ. The Guitar-Fishes.

Genus 45. RHINOBATUS Bloch & Schneider. *Guitar-fishes.*
Rhinobatus Bloch & Schneider, Syst. Ichth., 353, 1801 (*rhinobatus*).

81. Rhinobatus lentiginosus Garman.
From Charleston, South Carolina, southward.
Rhinobatus lentiginosus Garman, Bull. M. C. Z., VI, 168, 1880, coast of Florida.

82. Rhinobatus stellio Jordan & Rutter.
Jamaica.
Rhinobatus stellio Jordan & Rutter, Fishes of Jamaica, 1896, Jamaica.

83. Rhinobatus glaucostigma Jordan & Gilbert. *Guitarro.*
Gulf of California and southward.
Rhinobatus glaucostigma Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 210, Mazatlan.

84. Rhinobatus leucorhynchus Günther.
Panama and vicinity.
Rhinobatus leucorhynchus Günther, Proc. Zool. Soc. Lond. 1866, 604, Panama.

85. Rhinobatus productus Ayres. *Guitar-fish.*
San Francisco to San Diego.
Rhinobatus productus Ayres, in Girard, Proc. Ac. Nat. Sci. Phila. 1854, 196, Monterey.

86. Rhinobatus percellens (Walbaum). *Fiddler-fish; Puraque.*
West Indies to southern Brazil.
Raja percellens Walbaum, Artedi Piscium, 525, 1792; after Marcgrave.

87. Rhinobatus spinosus Günther.
Mexico.
Rhinobatus spinosus Günther, Cat., VIII, 518, 1870, Mexico.

88. Rhinobatus planiceps Garman.
Coast of Peru and Galapagos Islands.
Rhinobatus planiceps Garman, Bull. M. C. Z, VI, 168, 1880, Peru; Galapagos.

Rhina, Klein

Maurice Vingard. W.M. Smith.

Rhinobatos Linck.

R. Klein

ie Garman

Raja Stabuliforis Garman
see Garman

3.99.41

Genus 46. ZAPTERYX Jordan & Gilbert.
Zapteryx Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 53 (*exasperatus*).

89. Zapteryx exasperatus (Jordan & Gilbert).
San Diego Bay.
Platyrhina exasperata Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 32, San Diego.

90. Zapteryx xyster Jordan & Evermann.
Panama.
Zapteryx xyster Jordan & Evermann, Fishes North and Middle America, 65, 1896, Panama.

Genus 47. PLATYRHINOIDIS Garman.
Platyrhinoidis Garman, Proc. U. S. Nat. Mus. 1880, 522 (*triseriatus*).

91. Platyrhinoidis triseriatus (Jordan & Gilbert).
Coast of California from Point Conception southward.
Platyrhina triseriata Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 36, Santa Barbara, California.

Family XXIV. RAJIDÆ. The Skates.

Genus 48. RAJA (Artedi) Linnæus.
Raja (Artedi) Linnæus, Syst. Nat., ed. x, 231, 1758 (*batis*).

92. Raja erinacea Mitchill. *Common Skate; Little Skate; Tobacco Box.*
Very abundant from Virginia northward to Maine.
Raia erinacea Mitchill, Am. Jour. Sci. Arts, XI, 1825, 290, New York.

93. Raja ocellata Mitchill. *Big Skate.*
Coast of New York, Massachusetts, and northward.
Raja ocellata Mitchill, Trans. Lit. Phil. Soc., I, 1815, 477, New York.

94. Raja fyllæ Lütken.
Davis Straits, Greenland.
Raja fyllæ Lütken, Vid. Medd. Naturh. Foren. Kjöbenh. 1887, 1, pl. 1, Davis Straits.

95. Raja ~~radiata Don~~ovan. Scabrata Garman
North Atlantic; ~~both~~ in America ~~and Europe~~; not common on our coast.
~~*Raia radiata* Donovan, Hist. Brit. Fishes, v, pl. 114, 1820, Great Britain.~~

96. Raja plutonia Garman.
Deep water off South Carolina.
Raja plutonia Garman, Bull. Mus. Comp. Zool., XI, 236, 1881, off South Carolina.

97. Raja ackleyi Garman.
Yucatan Banks.
Raja ackleyi Garman, Bull. Mus. Comp. Zool., XI, 235, 1881, Yucatan Banks.

98. Raja ornata Garman.
Coast of South Carolina and Florida.
Raja ornata Garman, Bull. Mus. Comp. Zool., XI, 235, 1881, off South Carolina.

99. Raja eglanteria Bosc.
Cape Cod, southward to Florida; not very common.
Raia eglanteria Bosc, in Lacépède, Hist. Nat. Poiss., II, 103, 1800, Charleston, S. C.

100. Raja senta Garman.
Banks of Newfoundland to Cape Cod; in deep water.
Raja senta Garman, Proc. U. S. Nat. Mus. 1885, 43, Cape Cod Bay; Le Have Bank.

101. Raja ~~lævis~~ Mitchill. *Barndoor Skate.*
New England to Florida; not uncommon northward.
Raja lævis Mitchill, Amer. Monthly Mag., II, 1817, 327, New York.

Erinacea

102. Raja rhina Jordan & Gilbert.

Monterey to Alaska; not rare, especially northward.
Raja rhina Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 251, Monterey; San Francisco.

103. Raja binoculata Girard. *Big Skate of California.*

Pacific Coast from Monterey to Sitka; abundant.
Raja binoculata Girard, Proc. Ac. Nat. Sci. Phila. 1854, 196, San Francisco.

104. Raja inornata Jordan & Gilbert. *Common Skate of California.*

Coast of California; very abundant.
Raja inornata Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 457, San Francisco.

105. Raja equatorialis Jordan & Bollman.

West coast of Colombia, between Panama and the Galapagos Islands.
Raja equatorialis Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 150, off Colombia.

106. Raja parmifera Bean.

Coast of Alaska.
Raja parmifera Bean, Proc. U. S. Nat. Mus. 1881, 157, Unalaska.

107. Raja stellulata Jordan & Gilbert.

Coast of California and northward.
Raja stellulata Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 133, Monterey.

108. Raja aleutica Gilbert & Thoburn.

Unalaska, Aleutian Islands.
Raja aleutica Gilbert, Rept. U. S. Fish. Com. 1893 (1896), 397, pl. 21, Sannak Pass, Aleutian Islands, at Albatross Station 3257, in 81 fathoms.

109. Raja trachura Gilbert.

Santa Barbara Channel.
Raja trachura Gilbert, Proc. U. S. Nat. Mus. 1891, 539, off Santa Barbara, at Albatross Station 2923, in 822 fathoms.

110. Raja abyssicola Gilbert.

Queen Charlotte Island, British Columbia, in deep water.
Raja abyssicola Gilbert, Rept. U. S. Fish. Com. 1893 (1896), 396, pl. 20, off Queen Charlotte Island, at Albatross Station 3342, in 1,588 fathoms.

Family XXV. NARCOBATIDÆ. The Electric Rays.

Genus 49. TETRANARCE Gill.

Tetranarce Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1861, 387 (*occidentalis*).

111. Tetranarce occidentalis (Storer). *Cramp-fish; Torpedo; Numb-fish.*

Atlantic Coast of United States, Cape Cod to Cuba; not very common.
Torpedo occidentalis Storer, Am. Jour. Sci. Arts 1843, 165, Massachusetts.

112. Tetranarce californica (Ayres). *California Torpedo*

Coast of California; not noticed south of Monterey.
Torpedo californica Ayres, Proc. Cal. Ac. Sci. 1854, 70, San Francisco.

Genus 50. NARCINE Henle.

Narcine Henle, Ueber Narcine, 31, 1834 (*brasiliensis*).

113. Narcine brasiliensis (Ölfers). *Trembler.*

West Indies and Brazil, occasionally northward to Key West and Pensacola.
Torpedo brasiliensis Ölfers, Torpedo, 19, 1831, Brazil.

Genus 51. DISCOPYGE Tschudi.

Discopyge Tschudi, Fauna Peruana, 32, 1844 (*tschudii*).

114. Discopyge ommata Jordan & Gilbert.

Panama; rare.
Discopyge ommata Jordan & Gilbert, Proc. U. S. Nat. Mus. 1889, 151, Panama.

Raja rosispinis Gill & Townsend
= Raja obtusa. both young males
Bering Sea
Raja interrupta Gill & Townsend.
Bering Sea.

Navaccon Klein.
Dorpedo valmont?

Garman divides
Ursolophus into three

Suborder MASTICURA. The Whip-tailed Rays.

Family XXVI. DASYATIDÆ. The Sting Rays.

Genus 52. UROLOPHUS Müller & Henle. *Round Sting Rays.*
Urolophus Müller & Henle, Plagiostomen, 173, 1838 (*aurantiacus*=*cruciatus*).

115. Urolophus halleri Cooper.
Coast of California from Point Conception southward.
Urolophus halleri Cooper, Proc. Cal. Ac. Sci., III, 1863, 95, San Diego.

116. Urolophus nebulosus Garman.
Gulf of California to Panama.
Urolophus nebulosus Garman, Proc. U. S. Nat. Mus. 1885, 41, Colima.

117. Urolophus umbrifer Jordan & Starks.
West coast of Mexico.
Urolophus umbrifer Jordan & Starks, in Jordan, Fishes of Sinaloa, 17, 1895, Mazatlan, Mexico.

118. Urolophus jamaicensis (Cuvier). *Maid.*
West Indies, generally common; once (perhaps doubtfully) recorded from New Jersey.
Raja jamaicensis Cuvier, Règne Animal, ed. 1, 137, 1817, Jamaica.

119. Urolophus mundus (Gill).
Panama.
Urotrygon mundus Gill, Proc. U. S. Nat. Mus. 1863, 173, Panama.

120. Urolophus goodei Jordan & Bollman.
Panama.
Urolophus goodei Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 151, near Panama.

121. Urolophus aspidurus Jordan & Gilbert.
Panama.
Urolophus aspidurus Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 307, Panama.

122. Urolophus asterias Jordan & Gilbert. = mundus
Mazatlan to Panama.
Urolophus asterias Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 579, Mazatlan; Panama.

123. Urolophus rogersi Jordan & Starks.
West coast of Mexico.
Urolophus rogersi Jordan & Starks, in Jordan, Fishes of Sinaloa, 16, 1895, Mazatlan, Mexico.

Genus 53. DASYATIS Rafinesque. *Sting Rays.* Dasybatus Klein
Dasyatis Rafinesque, Caretteri di Alcuni Nuovi Gen., 16, 1810 (*ujo*=*pastinaca*).

Subgenus HEMITRYGON Müller & Henle.
Hemitrygon Müller & Henle, Mag. Nat. Hist. 1837, 90 (*bennetti*).

124. Dasyatis centrura (Mitchill). *Common Sting Ray; Stingaree; Clam Cracker.*
Coast of Maine to Cape Hatteras; abundant.
Raja centrura Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 479, New York.

Subgenus DASYATIS Rafinesque.

125. Dasyatis hastata (DeKay). *Kit.*
West Indies to Brazil, north to Florida and Rhode Island.
Trygon hastata DeKay, N. Y. Fauna: Fishes, 373, pl. 65, fig. 214, 1842, Rhode Island.

126. Dasyatis gymnura (Müller).
Surinam to Brazil, recorded from Grenada by Günther.
Trygon gymnura Müller, Ermann's Reise um die Erde, 25, taf. 13, 1830, Brazil.

127. Dasyatis sabina (LeSueur).
Streams and estuaries of Florida, abundant on both coasts.
Trygon sabina LeSueur, Jour. Ac. Nat. Sci. Phila., IV, 1824, 109, Florida.

128. Dasyatis longa (Garman).
Gulf of California to Panama.
Dasibatis longa Garman, Bull. Mus. Comp. Zool., VI, 170, 1880, Acapulco, Panama.

129. Dasyatis dipterura (Jordan & Gilbert).
Bay of San Diego, and southward; locally abundant.
Dasybatis dipterurus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 31, San Diego.

130. Dasyatis say (LeSueur). *Southern Sting Ray.*
Carolina to Brazil; common in Florida, occasional northward to New York.
Raja say LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 42, New Jersey.

Genus 54. PTEROPLATEA Müller & Henle.
Pteroplatea Müller & Henle, Plagiostomen, 168, 1838 (*altavela*).

131. Pteroplatea maclura (LeSueur). *Butterfly Ray.*
Rhode Island to Brazil.
Raia maclura LeSueur, Jour. Ac. Nat. Sci. Phila. 1817, 41, Rhode Island.

132. Pteroplatea crebripunctata Peters.
Gulf of California southward, along the west coast of Mexico; common.
Pteroplatea crebripunctata Peters, Monatsber. Berl. Akad. 1869, 703, Mazatlan.

133. Pteroplatea rava Jordan & Starks. *Manataria Colorada; Manta Raia.*
West coast of Mexico.
Pteroplatea rava Jordan & Starks, in Jordan, Fishes of Sinaloa, 18, 1895, Mazatlan, Mexico.

134. Pteroplatea marmorata Cooper.
Coast of California, from Point Conception southward to Cerros Island; common.
Pteroplatea marmorata Cooper, Proc. Cal. Ac. Sci., III, 1863, 112, San Diego.

Family XXVII. MYLIOBATIDÆ. The Eagle Rays.

Genus 55. AETOBATUS Blainville.
Aëtobatus Blainville, Jour. de Phys., LXXXIII, 1816, 261 (*vulgaris, narinari*, etc.).

135. Aetobatus narinari (Euphrasen). *Spotted Sting Ray.*
Tropical seas, north on Atlantic Coast to Virginia; not common on our shores.
Raia narinari Euphrasen, Vet. Ak. Nya. Handl., XI, 1790, 217, Brazil.

Genus 56. MYLIOBATIS Duméril.
Myliobatis Duméril, in Cuvier, Règne Animal, II, 137, 1817 (*aquila*).

Subgenus MYLIOBATIS Duméril.

136. Myliobatis freminvillei LeSueur.
Cape Cod to Brazil; not uncommon.
Myliobatis freminvillei LeSueur, Jour. Ac. Nat. Sci. Phila., IV, 1824, 111, Rhode Island.

137. Myliobatis goodei Garman.
Central America.
Myliobatis goodei Garman, Proc. U. S. Nat. Mus. 1885, 39, Central America.

Mécrusa

Summer

P. altavela

Penzance Pt. Boggards B. Nichols
Exp. Sept 15. 1922

Common at Mazatlan, La Paz,

Carolo Louis robertin Boulenger.

Subgenus HOLORHINUS Gill.

Holorhinus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 331 (*vespertilio*=*californicus*).

138. Myliobatis californicus Gill. *California Sting Ray; Batfish.*

California, from Cape Mendocino southward.

Myliobatis californicus Gill, Ann. Lyc. Nat. Hist. N. Y. 1865, 137; after Girard.

Genus 57. RHINOPTERA Kuhl.

Rhinoptera Kuhl, in Cuvier, Règne Animal, ed. 2, vol. II, 401, 1829 (*marginata*).

Subgenus RHINOPTERA Kuhl.

139. Rhinoptera bonasus (Mitchill). *Cow-nose Ray.* quadriloba LeSueur

Cape Cod to Florida.

Raja bonasus Mitchill, Trans. Lit. and Phil. Soc. N. Y. 1815, 479, New York.

140. Rhinoptera steindachneri Evermann & Jenkins. *Gabilan.*

Gulf of California.

Rhinoptera steindachneri Evermann & Jenkins, Proc. U. S. Nat. Mus. 1891, 130, pl. 1, fig. 1, Guaymas, Sonora, Mexico.

Subgenus MICROMESUS Gill.

Micromesus Gill, Ann. Lyc. Nat. Hist. N. Y. 1865, 136 (*adspersus*).

141. Rhinoptera ensenadæ Rosa Smith.

West coast of Lower California.

Rhinoptera ensenadæ Rosa Smith, Proc. U. S. Nat. Mus. 1886, 220, Ensenada, Lower California.

Mobulidæ

Family XXVIII. ~~MANTIDÆ~~. The Sea Devils.

Genus 58. ~~AODON Lacépède~~. MOBULA Rafinesque.

Aodon Lacépède, Hist. Nat. Poiss., I, 300, 1798 (*massassa*).

142 ~~Aodon~~ hypostomus (Bancroft).

Jamaica.

Cephalopterus hypostomus Bancroft, Proc. Comm. Zool. Soc. 1830, 134, Jamaica.

Genus 59. MANTA Bancroft.

Manta Bancroft, Zool. Jour., IV, 1828–29, 444 (*manta*=*birostris*).

143. Manta birostris (Walbaum). *Sea Devil; Devil-fish: Manta.*

Tropical waters of America; north to New Jersey and San Diego; not rare on the Florida coast.

Raia birostris Walbaum, Artedi Piscium, 535, 1792; after *Diabolus marinus* Willughby, etc.

Subclass HOLOCEPHALI. The Chimæras.

Order H. CHIMÆROIDEI. The Chimæroids.

Family XXIX. CHIMÆRIDÆ. The Chimæras.

Genus 60. CHIMÆRA Linnæus. *Elephant-fishes.*

Chimæra Linnæus, Syst. Nat., ed. x, 236, 1758 (*monstrosa*).

144. Chimæra monstrosa Linnæus. *Chimæra.*

Deep waters off the coast of Europe; also recorded by Poey at Matanzas, Cuba.

Chimæra monstrosa Linnæus, Syst. Nat., ed. x, 236, 1758, Atlantic.

145. Chimæra affinis Capello. Psychrolutes

Deep waters of the Atlantic, off Portugal and off the American coast from Cape Cod northward.

Chimæra affinis Capello, Jour. Soc. Math. Lisb., IV, 1868, 314, pl. III, coast of Portugal.

Genus 61. HYDROLAGUS Gill.

Hydrolagus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 331 (*colliei*).

146. Hydrolagus colliei (Lay & Bennett). *Rat-fish; Elephant-fish.*

Pacific Coast from Monterey northward to Alaska.

Chimæra colliei Lay & Bennett, Beechey's Voy., Zool., 71, 1849, North Pacific.

Genus 62. HARRIOTTA Goode & Bean.

Harriotta Goode & Bean, Proc. U. S. Nat. Mus. 1894 (Jan. 26, 1895), 471 (*raleighana*).

147. Harriotta raleighana Goode & Bean.

Deep water off the North Atlantic Coast of the United States.

Harriotta raleighana Goode & Bean, Proc. U. S. Nat. Mus. 1894 (Jan. 26, 1895), 472, pl. 19, Gulf Stream at 39° N., 70° W.

Subclass TELEOSTOMI. The True Fishes.

Series GANOIDEI. The Ganoid Fishes.

Superorder CHONDROGANOIDEA. The Cartilaginous Ganoids.

Order I. SELACHOSTOMI. The Paddle-fishes.

Family XXX. POLYODONTIDÆ. The Paddle-fishes.

Genus 63. POLYODON Lacépède.

Polyodon Lacépède, Hist. Nat. Poiss., I, 402, 1798 (*feuille*).

148. Polyodon spathula (Walbaum). *Paddle-fish; Spoon-bill Cat; Duck-bill Cat; Spade-fish.*

Mississippi Valley and rivers of the Southern States; Lake Erie.

Squalus spathula Walbaum, Artedi Piscium, 522, 1792, no locality given.

Order J. CHONDROSTEI. The Sturgeons.

Family XXXI. ACIPENSERIDÆ. The Sturgeons.

Genus 64. ACIPENSER Linnæus. *Sturgeons.*

Acipenser (Artedi) Linnæus, Syst. Nat., ed. x, 237, 1758 (*sturio*).

149. Acipenser transmontanus Richardson. *White Sturgeon; Oregon Sturgeon; Sacramento Sturgeon.*

Pacific Coast, from Alaska south to Monterey; ascending the Sacramento, Columbia, and Fraser rivers in large numbers in spring.

Acipenser transmontanus Richardson, Fauna Bor.-Amer., III, 278, 1836, Fort Vancouver.

150. Acipenser medirostris Ayres. *Green Sturgeon.*

Pacific Coast; ascending the rivers from San Francisco northward.

Acipenser medirostris Ayres, Proc. Cal. Ac. Sci., I, 1854, 15, San Francisco.

151. Acipenser sturio Linnæus. *Common Sturgeon.*

Atlantic coasts; ascending rivers of northern Europe and the United States.

Acipenser sturio Linnæus, Syst. Nat., ed. x, 237, 1758, seas of Europe.

152. Acipenser rubicundus LeSueur. *Lake Sturgeon; Ohio Sturgeon; Stone Sturgeon; Rock Sturgeon; Red Sturgeon.*

Upper Mississippi Valley, Great Lakes, and northward.

Acipenser rubicundus LeSueur, Trans. Amer. Phil. Soc., I, 1818, 388, Lakes Ontario, Erie, and all the upper lakes.

New Jersey.

Forbes,

Glyptodontes reabrieés
Lawrence, Kansas
megalopr. Aspah Fe
Forbes, Pore
1910

Regan has received
also

153. Acipenser brevirostris LeSueur. *Short-nosed Sturgeon.*
Cape Cod to Florida; rare northward.
Acipenser brevirostrum LeSueur, Trans. Amer. Phil. Soc., I, 1818, 390, Delaware River.

Genus 65. SCAPHIRHYNCHUS Heckel. *Shovel-nose Sturgeons.*
Scaphirhynchus Heckel, Ann. Wiener Mus. Naturgesch., I, 1835, 71 (*rafinesquei* = *platorhynchus*).

154. Scaphirhynchus platorhynchus (Rafinesque). *Shovel-nose Sturgeon; White Sturgeon.*
Mississippi Valley, and streams of Western and Southern States; common.
Acipenser platorhynchus Rafinesque, Ichth. Ohiensis, 80, 1820, Ohio River.

Subclass HOLOSTEI. The Bony Ganoids.

Order K. RHOMBOGANOIDEA. The Gar Pikes.

Family XXXII. LEPISOSTEIDÆ. The Gar Pikes.

Genus 66. LEPISOSTEUS Lacépède. Psalisostomus Klein
Lepisosteus Lacépède, Hist. Nat. Poiss., v, 331, 1803 (*gavialis* = *osseus*).

Subgenus LEPISOSTEUS Rafinesque.

155. Lepisosteus osseus (Linnæus). *Long-nosed Gar; Billfish; Common Gar Pike.*
Great Lakes and rivers of United States from Vermont to the Rio Grande.
Esox osseus Linnæus, Syst. Nat., ed. x, 313, 1758; after Artedi, based on *Acus maxima squamosa viridis.*

Subgenus CYLINDROSTEUS Rafinesque.
Cylindrosteus Rafinesque, Ichth. Ohiensis, 72, 1820 (*platostomus*).

156. Lepisosteus platostomus Rafinesque. *Short-nosed Gar.*
Great Lakes and Southern and Western rivers; less abundant northward.
Lepisosteus platostomus Rafinesque, Ichth. Ohiensis, 72, 1820, Ohio River.

Subgenus ATRACTOSTEUS Rafinesque.
Atractosteus Rafinesque, Ichth. Ohiensis, 72, 1820 (*ferox*).

157. Lepisosteus tristœchus (Bloch & Schneider). *Alligator Gar; Great Gar; Manjuari.*
Rivers of the Southern States; Cuba and northern Mexico; north to St. Louis and Cincinnati.
Esox tristœchus Bloch & Schneider, Syst. Ichth., 395, 1801, Cuba; after *Manjuari* of Para.

158. Lepisosteus tropicus (Gill).
Streams of the Pacific Coast of Central America.
Atractosteus tropicus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 172, streams near Panama.

Order L. CYCLOGANOIDEA. The Bowfins.

Family XXXIII. AMIIDÆ. The Bowfins.

Genus 67. AMIA Linnæus. *Bowfins.* AMIATUS Rafinesque
Amia Linnæus, Syst. Nat., ed. XII, 500, 1766 (*calva*).

159. Amia calva Linnæus. *Mudfish; Dogfish; Bowfin; Grindle; "John A. Grindle"; Lawyer; Poisson de Marais.*
Great Lakes and sluggish waters from Minnesota to Virginia, Florida, and Texas; abundant.
Amia calva Linnæus, Syst. Nat., ed. XII, 500, 1766, Charleston, South Carolina.

Series TELEOSTEI. The Bony Fishes.

Subclass OSTARIOPHYSI.

Order M. NEMATOGNATHI. The Catfishes.

Family XXXIV. SILURIDÆ. The Catfishes.

Genus 68. FELICHTHYS Swainson. *Gaff-topsail Catfishes.*

Felichthys Swainson, Nat. Hist. Fishes, II, 305, 1839, substitute for *Breviceps* (*bagre*).

160. Felichthys panamensis (Gill).

Mazatlan to Panama; common.

Ailurichthys panamensis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 172, Panama.

161. Felichthys bagre (Linnæus).

Coast of Brazil, accredited to the West Indies, but rare north of Surinam.

Silurus bagre Linnæus, Syst. Nat., ed. XII, 505, 1766, South America; after Gronow.

162. Felichthys pinnimaculatus (Steindachner).

Mazatlan to Panama.

Ailurichthys pinnimaculatus Steindachner, Ichth. Beitr., IV, 15, 1875, Panama, Altata, Costa Rica.

163. Felichthys eydouxii (Cuvier & Valenciennes).

Guayaquil.

Galeichthys eydouxii Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 43, 1840, Guayaquil.

164. Felichthys filamentosus Swainson.

Atlantic Coast of tropical America.

Felichthys filamentosus Swainson, Nat. Hist. Anim., II, 305, 1839; after Bloch, pl. 365.

165. Felichthys marinus (Mitchill). *Sea Catfish; Gaff Topsail.*

Cape Cod to Texas.

Silurus marinus Mitchill, Trans. Lit. and Phil. Soc. N. Y., I, 1815, 433, New York.

166. Felichthys bahiensis (Castelnau).

Mexico to Bahia.

Galeichthys bahiensis Castlenau, Anim. Amer. Sud, 37, 1855, Bahia.

Genus 69. GALEICHTHYS Cuvier & Valenciennes. *Sea Catfishes.*

Galeichthys Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 28, 1840 (*feliceps*).

167. Galeichthys lentiginosus (Eigenmann & Eigenmann).

Panama.

Tachisurus lentiginosus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 139, Panama.

168. Galeichthys peruvianus Lütken.

Pacific Coast of Mexico to Peru.

Galeichthys peruvianus Lütken, Vidensk. Med. 1874, 204, Callao, Peru.

Subgenus HEXANEMATICHTHYS Bleeker.

Hexanematichthys Bleeker, Ichthyol. Archip. Indici Siluri, 61, 1858 (*sundaicus*).

169. Galeichthys felis (Linnæus). *Sea Catfish.*

Cape Cod to Texas.

Silurus felis Linnæus, Syst. Nat., ed. XII, 503, 1766, Charleston, South Carolina.

170. Galeichthys seemani (Günther).

Panama.

Arius seemani Günther, Cat., V, 147, 1864, "Central America."

171. Galeichthys gilberti Jordan & Williams.
Coast of Sinaloa, Mexico.
Galeichthys gilberti Jordan & Williams, Fishes of Sinaloa, in Proc. Cal. Ac. Sci. 1895, 395, pl. 26, Mazatlan, Sinaloa.

172. Galeichthys jordani (Eigenmann & Eigenmann).
Panama.
Tachisurus jordani Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 142, Panama.

173. Galeichthys cærulescens (Günther).
West coast of Guatemala.
Arius cærulescens Günther, Cat., v, 149, 1864, Rio Huamuchal, Guatemala.

174. Galeichthys guatemalensis (Günther).
Mazatlan to Central America.
Arius guatemalensis Günther, Cat., v, 145, 1864, Guatemala; Chiapas.

175. Galeichthys assimilis (Günther).
Atlantic Coast of Central America.
Arius assimilis Günther, Cat., v, 146, 1864, Lake Yzabal, Guatemala.

176. Galeichthys surinamensis (Bleeker).
Surinam.
Hexanematichthys surinamensis Bleeker, Versl. Med. Akad. Wet. Amsterd. 1862, 380, Surinam.

177. Galeichthys azureus Jordan & Williams. *Bagre Azul.*
Coast of Sinaloa, Mexico.
Galeichthys azureus Jordan & Williams, Fishes of Sanaloa, in Proc. Cal. Ac. Sci. 1895, 398, pl. 27, Mazatlan, Mexico.

178. Galeichthys dasycephalus (Günther).
Panama.
Arius dasycephalus Günther, Cat., v, 157, 1864, Oahu; apparently an error.

179. Galeichthys longicephalus (Eigenmann & Eigenmann).
Panama.
Tachisurus longicephalus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 143, Panama.

180. Galeichthys rugispinis (Cuvier & Valenciennes).
Surinam to Para.
Arius rugispinis Cuvier & Valenciennes, Hist. Nat. Poiss., xv, 77, 1840, Cayenne.

181. Galeichthys phrygiatus (Cuvier & Valenciennes).
Surinam to Maranhão.
Arius phrygiatus Cuvier & Valenciennes, Hist. Nat. Poiss., xv, 79, 1810, Cayenne.

Genus 70. SCIADEICHTHYS Bleeker.
Sciadeichthys Bleeker, Ichthyol. Archip. Indici Siluri, 62, 1858 (*emphysetus*).

182. Sciadeichthys troscheli (Gill). *Bagre Colorado.*
Mazatlan to Panama.
Sciades troscheli Gill, Proc. Ac. Nat. Sci. Phila. 1863, 171, Panama.

183. Sciadeichthys emphysetus (Müller & Troschel).
Surinam.
Bagrus (*Sciades*) *emphysetus* Müller & Troschel, Horæ Ichthyol., III, 8, 1849, Surinam.

184. Sciadeichthys temminckianus (Cuvier & Valenciennes).
Cayenne, French Guiana.
Bagrus temminckianus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 463, 1839, Cayenne, French Guiana.

185. Sciadeichthys flavescens (Cuvier & Valenciennes).
Cayenne, French Guiana.
Bagrus flavescens Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 462, 1839, Cayenne, French Guiana.

186. Sciadeichthys mesops (Cuvier & Valenciennes).
French Guiana.
Bagrus mesops Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 456, 1839, French Guiana.

187. Sciadeichthys proops (Cuvier & Valenciennes).
West Indies from Porto Rico to Surinam and south to Pernambuco.
Bagrus proöps Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 457, 1839, Cayenne, French Guiana; Surinam; Porto Rico.

188. Sciadeichthys passany (Cuvier & Valenciennes).
Cayenne, French Guiana.
Bagrus passany Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 458, 1839, Cayenne, French Guiana.

189. Sciadeichthys albicans (Cuvier & Valenciennes).
Guiana to the Amazon.
Bagrus albicans Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 461, pl. 420, 1839, Cayenne, French Guiana.

Genus 71. SELENASPIS Bleeker.
Selenaspis Bleeker, Ichthyol. Archip. Indici Siluri, 62, 1858 (*herzbergii*).

190. Selenaspis herzbergii (Bloch).
Coasts of South America from Cayenne to Para; common.
Silurus herzbergii Bloch, Ichthyol., VIII, 33, pl. 367, 1801, Surinam.

191. Selenaspis dowii (Gill).
Panama to Guayquil.
Leptarius dowii Gill, Proc. Ac. Nat. Sci. Phila. 1863, 170, Panama.

192. Selenaspis parkeri (Traill). *Bresson.*
Guiana to Para.
Silurus parkeri Traill, Mem. Werner. Soc., VI, 1832, 377, pl. 6, Guiana.

193. Selenaspis luniscutis (Cuvier & Valenciennes).
Surinam to Rio Janeiro; common.
Arius luniscutis Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 109, 1840, Brazil.

Genus 72. NETUMA Bleeker.
Netuma Bleeker, Ichthyol. Archip. Indici Siluri, 62, 1858 (*nasuta*).

Subgenus NOTARIUS Gill.
Notarius Gill, Proc. Ac. Nat. Sci. Phila. 1863, 170 (*dowi*).

194. Netuma grandicassis (Cuvier & Valenciennes).
Guiana to Bahia.
Arius grandicassis Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 53, pl. 427, 1840, Guiana.

195. Netuma stricticassis (Cuvier & Valenciennes).
Surinam to Bahia.
Arius stricticassis Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 58, 1840, Cayenne, French Guiana.

196. Netuma dubia (Bleeker).
Surinam.
Netuma dubia Bleeker, Versl. Med. Ac. Wet. Amsterd., XIV, 1862, 382, Surinam.

Proc. U. S. N. M.

197. Netuma kessleri (Steindachner).
Altata to Panama.
Arius kessleri Steindachner, Ichth. Beitr., IV, 24, 1876, Altata; Panama.

198. Netuma insculpta (Jordan & Gilbert).
Panama.
Arius insculptus Jordan & Gilbert, Bull. U. S. Fish Com. 1882 (1883), 41, Panama.

199. Netuma planiceps (Steindachner).
Altata to Panama.
Arius planiceps Steindachner, Ichth. Beitr., IV, 1876, 26, Altata; Panama.

200. Netuma platypogon (Günther).
Gulf of California to Peru.
Arius platypogon Günther, Cat., V, 147, 1864, San José de Guatemala.

201. Netuma oscula (Jordan & Gilbert).
Panama.
Arius osculus Jordan & Gilbert, Bull. U. S. Fish Com. 1882 (1883), 46, Panama.

202. Netuma elattura (Jordan & Gilbert).
Panama.
Arius elatturus Jordan & Gilbert, Bull. U. S. Fish Com. 1882 (1883), 45, Panama.

203. Netuma insularum Flora Hartley Greene.
Galapagos Islands.
Netuma insularum Flora Hartley Greene, in Jordan & Evermann, Fishes North and Middle America, 73, 1896, Galapagos Islands.

Genus 73. TACHYSURUS Lacépède.
Tachysurus Lacépède, Hist. Nat. Poiss., V, 151, 1803 (*chinensis*).

204. Tachysurus nuchalis (Günther).
Guiana.
Arius nuchalis Günther, Cat., V, 171, 1864, British Guiana.

205. Tachysurus fissus (Cuvier & Valenciennes).
Surinam.
Arius fissus Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 107, 1840, Cayenne.

206. Tachysurus spixii (Agassiz).
Coast of Guiana and Brazil, south to Santos.
Pimelodus spixii Agassiz, Gen. Spec. Pisc. Brasil., 19, 1829; after Spix.

207. Tachysurus melanopus (Günther).
Both coasts of Central America; Rio Motagua; Panama.
Arius melanopus Günther, Cat., V, 172, 1864, Rio Motagua.

208. Tachysurus furthii (Steindachner).
Panama.
Arius furthii Steindachner, Ich. Beitr., IV, 29, 1876, Panama.

209. Tachysurus liropus Bristol.
San Juan Lagoon, Rio Ahome, Sonora.
Tachysurus liropus Bristol MS., San Juan Lagoon, Rio Ahome, Sonora.

210. Tachysurus variolosus (Cuvier & Valenciennes).
Cayenne, French Guiana.
Arius variolosus Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 107, 1840, Cayenne, French Guiana.

211. Tachysurus multiradiatus (Günther).
Rio Bayano, near Panama.
Arius multiradiatus Günther, Cat., V, 173, 1864, Rio Bayano; after Kner.

Genus 74. CATHOROPS Jordan & Gilbert.

Cathorops Jordan & Gilbert, Bull. U. S. Fish. Com. 1882, 54 (*hypophthalmus*).

212. Cathorops hypophthalmus (Steindachner).

Panama.

Arius hypophthalmus Steindachner, Ichth. Beitr., IV, 31, pl. 10, 1875, Panama.

213. Cathorops gulosus (Eigenmann & Eigenmann).

Panama.

Tachisurus gulosus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 1[illegible] Panama.

Genus 75. ICTALURUS Rafinesque. *Channel Cats.*

Ictalurus Rafinesque, Ichth. Ohiensis, 61, 1820 (*maculatus*=*punctatus*).

214. Ictalurus furcatus (LeSueur). *Chuckle-head Cat.*

Ohio to Iowa and Texas.

Pimelodus furcatus LeSueur, in Cuvier & Valenciennes, Hist. Nat. Poiss., I 136, 1840, New Orleans.

215. Ictalurus punctatus (Rafinesque). *Channel Cat; White Cat; Blue Cat.*

Rivers of Great Lakes region and Mississippi Valley and streams tributary the Gulf of Mexico.

Silurus punctatus Rafinesque, Amer. Month. Mag. 1818, 359, Ohio River.

216. Ictalurus meridionalis (Günther).

Rio Usumacinta, Guatemala.

Amiurus meridionalis Günther, Cat., V, 102, 1864, Rio Usumacinta.

Genus 76. VILLARIUS Rutter.

Villarius Rutter, Proc. Cal. Ac. Sci. 1896, 256 (*pricei*).

217. Villarius pricei Rutter.

Northwestern Mexico.

Villarius pricei Rutter, Proc. Cal. Ac. Sci. 1896, 257, Rio Yaqui, Sonora.

218. Villarius dugesi (Bean).

Rio Turbio, Guanajuato, Mexico, west of the Sierra Madre.

Amiurus dugesi Bean, Proc. U. S. Nat. Mus. 1879, 304, Rio Turbio, Mexico.

Genus 77. AMEIURUS Rafinesque.

Ameiurus Rafinesque, Ichth. Ohiensis, 65, 1820 (*cupreus*=*natalis*).

Subgenus HAUSTOR Jordan & Evermann.

Haustor Jordan & Evermann, Fishes North and Middle America, 137, 1[illegible] (*lacustris*).

219. Ameiurus lacustris (Walbaum). *Catfish of the Lakes; Great Fork-tailed C[illegible] Mississippi Cat; Florida Cat; Flannel-mouth Cat; Mathemeg, or U[illegible] Fish.*

Saskatchewan River and Great Lakes to Florida and Texas.

Gradus lacustris Walbaum, Artedi Piscium, 144, 1792, Arctic America.

220. Ameiurus lupus (Girard).

Rio Nueces and Rio Pecos, Texas.

Pimelodus lupus Girard, Pac. R. R. Surv., X, 211, 1858, Rio Pecos, Texas.

221. Ameiurus catus (Linnæus). *White Cat; Channel Cat of the Potomac.*

Delaware River to Texas; introduced into Sacramento and San Joaq[illegible] rivers.

Silurus catus Linnæus, Syst. Nat., ed. X, 305, 1758, northern part of Ameri[illegible]

22. Ameiurus okeechobeensis (Heilprin). *Okeechobee Catfish.*

Florida.

Ictalurus okeechobeensis Heilprin, Trans. Wagner Inst. Sci. Phila., I, 18 129, pl. 18, Kissimee River, Florida.

Subgenus AMEIURUS Rafinesque.

223. Ameiurus erebennus Jordan.
New Jersey to Florida.
Amiurus erebennus Jordan, Bull. U. S. Nat. Mus., x, 85, figs. 19 and 20, 1877, St. Johns River, Florida.

224. Ameiurus natalis (LeSueur). *Yellow Cat.*
Great Lakes region to Virginia and Texas.
Pimelodus natalis LeSueur, Mém. Mus., v, 154, 1819, North America.

225. Ameiurus vulgaris (Thompson).
Vermont to Minnesota and Illinois.
Pimelodus vulgaris Thompson, Hist. Vermont, 138, 1842, Lake Champlain.

226. Ameiurus nebulosus (LeSueur). *Horned Pout; Common Bullhead; Schuylkill Cat; Small Catfish; Sacramento Cat.*
Great Lakes, Ohio Valley, eastward to Maine, southwestward to Texas, and southeastward to Florida; introduced into the Sacramento, San Joaquin, Humboldt, and Gila rivers.
Pimelodus nebulosus LeSueur, Mém. Mus., v, 149, 1819, Lake Ontario.

226a. Ameiurus nebulosus catulus (Girard).
Texas and northward into Arkansas.
Pimelodus catulus Girard, Pac. R. R. Surv., x, 208, 1858, Fort Smith, Arkansas.

226b. Ameiurus nebulosus marmoratus (Holbrook).
Indiana to Florida.
Pimelodus marmoratus Holbrook, Jour. Ac. Nat. Sci. Phila. 1855, 54, South Carolina.

227. Ameiurus melas (Rafinesque). *Black Bullhead; Small Catfish.*
Northern New York to Kansas and Texas.
Silurus melas Rafinesque, Quart. Jour. Sci. Lit. Arts Lond. 1820, 51, Ohio River.

228. Ameiurus platycephalus (Girard). *Mud Cat; Brown Cat.*
Carolina and eastern Georgia, from Cape Fear River to the Chattahoochee.
Pimelodus platycephalus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 161, Anderson, South Carolina.

Subgenus GRONIAS Cope.
Gronias Cope, Proc. Ac. Nat. Sci. Phila. 1864, 231 (*nigrilabris*).

229. Ameiurus nigrilabris (Cope).
Cave streams tributary to Conestoga River in eastern Pennsylvania.
Gronias nigrilabris Cope, Proc. Ac. Nat. Sci. Phila. 1864, 231, Conestoga River, Pennsylvania.

Genus 78. LEPTOPS Rafinesque.
Leptops Rafinesque, Ichth. Ohiensis, 64, 1820 (*viscosus*=*olivaris*).

230. Leptops olivaris (Rafinesque). *Mud Cat; Yellow Cat; Bashaw; Russian Cat.*
Rivers of the Mississippi Valley and Southern States, southwest to Chihuahua, Mexico.
Silurus olivaris Rafinesque, Amer. Month. Mag. 1818, 355, Ohio River.

Genus 79. NOTURUS Rafinesque. *Stone Cats.*
Noturus Rafinesque, Amer. Month. Mag., November, 1818, 41 (*flavus*).

231. Noturus flavus Rafinesque. *Stone Cat.*
Great Lakes region, westward and south to Montana, Wyoming, and Texas.
Noturus flavus Rafinesque, Amer. Month. Mag. 1818, 41, Falls of Ohio River.

Genus 80. SCHILBEODES Bleeker. *Mad Toms.*

Schilbeodes Bleeker, Ichth. Archip. Indici. Prodr. Siluri., 258, 1858 (*gyrinus*).

Subgenus SCHILBEODES Bleeker.

232. Schilbeodes gyrinus (Mitchill).

Hudson River and westward through the Mississippi Valley, the upper lake region, and Rainy River.

Silurus gyrinus Mitchill, Amer. Month. Mag. 1818, 322, Walkill River, New York.

233. Schilbeodes leptacanthus (Jordan).

Gulf States.

Noturus leptacanthus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 352, Etowah River, Rome, Georgia.

Subgenus RABIDA Jordan & Evermann.

Rabida Jordan & Evermann, Fishes North and Middle America, 146, 1896 (*furiosus*).

234. Schilbeodes nocturnus (Jordan & Gilbert).

Lower Wabash River in Indiana, and the Poteau, Washita, and Saline rivers, Arkansas.

Noturus nocturnus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 6, Saline River at Benton, Arkansas.

235. Schilbeodes funebris (Gilbert & Swain).

Tributary of Black Warrior River, Tuscaloosa, Alabama.

Noturus funebris Gilbert & Swain, Bull. U. S. Fish. Com. 1889, 153, North River, Tuscaloosa, Alabama.

236. Schilbeodes exilis (Nelson).

Wisconsin to Missouri and Kansas.

Noturus exilis Nelson, Bull. Ill. Lab. Nat. Hist., vol. 1, No. 1, 51, 1876, Illinois River.

237. Schilbeodes insignis (Richardson). *Mad Tom.*

Pennsylvania to South Carolina.

Pimelodus insigne Richardson, Fauna Bor.-Amer., III, 132, 1836; based on *Pimelode livrée* LeSueur.

238. Schilbeodes gilberti (Jordan & Evermann).

Roanoke River in southwestern Virginia.

Noturus gilberti Jordan & Evermann, Proc. U. S. Nat. Mus. 1888, 352, Roanoke River, Roanoke, Virginia.

239. Schilbeodes eleutherus (Jordan).

Mississippi Valley.

Noturus eleutherus Jordan, Ann. Lyc. Nat. Hist. N. Y., XI, 1876 (1877), 371, Big Pigeon River, Newport, Tennessee.

240. Schilbeodes miurus (Jordan).

Mississippi Valley and tributaries of Lake Michigan, south to Louisiana.

Noturus miurus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1877, 371, White River, Indiana.

241. Schilbeodes furiosus (Jordan & Meek).

Eastern and central North Carolina.

Noturus furiosus Jordan & Meek, Proc. U. S. Nat. Mus. 1888, 351, Neuse River, Milburnie, North Carolina.

Genus 81. RHAMDIA Bleeker. *Bagres de Rio.*

Rhamdia Bleeker, Ichth. Arch. Ind. Siluri., 197, 1858 (*quelen*).

Subgenus RHAMDIA Bleeker.

242. Rhamdia wagneri (Günther). *Barbudo.*

Rivers of Central America.

Pimelodus wagneri Günther, Fishes Cent. Am., 474, 1869, Atlantic and Pacific rivers of Panama.

Pimelodon insignarius Le Sueur. Vaillant
B.S. Phelom 1896 .28. plate unpub.
1819

Meek 1907

Cochlamia mulleri

Rhaphis organi

Pentyfrenius impicus

Pecilia tenuis

Guatemala

Subgenus RHAMDELLA Eigenmann & Eigenmann.

Rhamdella Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., 2d series, I, 1888, 129 (*eriarcha*).

243. Rhamdia baronis-mulleri (Troschel).

"Pacific Ocean" in Mexico.

Pimelodus baronis-mülleri Troschel, in Müller's Beiträge zur Geschichte, Statistik und Zoologie von Mexico, III, 636, 1865, no definite locality.

244. Rhamdia motaguensis (Günther).

Rio Motagua, Guatemala.

Pimelodus motaguensis Günther, Cat., V, 127, 1864, Rio Motagua, Guatemala.

245. Rhamdia brachyptera (Cope).

Orizaba, Mexico.

Pimelodus brachypterus Cope, Trans. Am. Phil. Soc. 1866, 404, Orizaba, Mexico.

246. Rhamdia salvini (Günther).

Rio San Geronimo, Guatemala.

Pimelodus salvini Günther, Cat., V, 130, 1864, Rio San Geronimo, Guatemala.

247. Rhamdia hypselura (Günther).

Mexico.

Pimelodus hypselurus Günther, Cat., V, 126, 1864, Mexico.

248. Rhamdia laticauda (Heckel).

Mexico.

Pimelodus laticaudus Heckel, in Kner, Sitz. Wien. Ac., XXVI, 420, 1757, Mexico.

249. Rhamdia godmani (Günther).

Valley of Rio Usumacinta, Guatemala.

Pimelodus godmani Günther, Cat., V, 124, 1864, Rio Usumacinta, Guatemala.

250. Rhamdia guatemalensis (Günther).

Rio Huamuchal, Guatemala.

Pimelodus guatemalensis Günther, Cat., V, 122, 1864, Rio Huamuchal, Guatemala.

251. Rhamdia nicaraguensis (Günther).

Lake Nicaragua, Nicaragua.

Pimelodus nicaraguensis Günther, Cat., V, 125, 1864, Lake Nicaragua. Nicaragua.

252. Rhamdia microptera (Günther).

Rio San Geronimo, Guatemala.

Pimelodus micropterus Günther, Cat., V, 124, 1864, Rio San Geronimo. Guatemala.

253. Rhamdia managuensis (Günther).

Lake Managua, Nicaragua.

Pimelodus managuensis Günther, Fishes Cent. Am., 474, 1869, Lake Managua, Nicaragua.

254. Rhamdia polycaula (Günther).

Rio San Geronimo, Guatemala.

Pimelodus polycaulus Günther, Cat., V, 131, 1864, Rio San Geronimo, Guatemala.

255. Rhamdia petenensis (Günther).

Lake Peten, Yucatan.

Pimelodus petenensis Günther, Cat., V, 126, 1864, Lake Peten, Yucatan.

256. Rhamdia parryi (Eigenmann).

Rio Zanalenco, Chiapas.

Rhamdella parryi Eigenmann, Proc. Cal. Ac. Sci. 1888, 130, Rio Zanalenco, Chiapas.

Genus 82. PIMELODELLA Eigenmann & Eigenmann.

Pimelodella Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 131 (*cristatus*).

257. Pimelodella chagresi (Steindachner).

Rio Chagres, Panama.

Pimelodus chagresi Steindachner, Ichth. Beitr., IV, 34, 1876, Rio Chagres, at Obispo.

258. Pimelodella modesta (Günther).

Esmeraldas, Ecuador; also recorded, perhaps doubtfully, from Rio Chagres.

Pimelodus modestus Günther, Proc. Zool. Soc. Lond. 1860, 239, Esmeraldas, Ecuador.

Genus 83. PIMELODUS Lacépède. *Congros Barbosos.*

Pimelodus Lacépède, Hist. Nat. Poiss., V, 94, 1803 (*quadrimaculatus*, etc.; includes various genera).

259. Pimelodus maculatus Lacépède. *Congro Barboso.*

Rio Mamoni (Panama) and southeastward to Rio de la Plata.

Pimelodus maculatus Lacépède, Hist. Nat. Poiss., V, 94, 107, 1803, Rio de la Plata.

Family XXXV. LORICARIIDÆ.

Genus 84. LORICARIA Linnæus.

Loricaria Linnæus, Syst. Nat., ed. X, 307, 1758 (*cataphracta*).

Subgenus HEMIODON Kner.

Hemiodon Kner, Panzerwelse, 89, 1853 (*depressus*).

260. Loricaria panamensis Eigenmann & Eigenmann.

Panama.

Loricaria panamensis Eigenmann & Eigenmann, S. A. Nematognathi, 365, 1890, Panama.

Subgenus STURISOMA Swainson.

Sturisoma Swainson, Nat. Hist. Fishes, II, 304, 1839 (*rostrata*).

261. Loricaria rostrata Spix.

Rivers of eastern South America from Panama to Paraguay River.

Loricaria rostrata Spix, Pisc. Brasil., 5, 1829, Rio Blanco.

Subgenus RINELORICARIA Bleeker.

Rineloricaria Bleeker, Nederl. Tijdschr. Dierk., 80, 1863 (*lima*).

262. Loricaria lima Kner.

Brazil, from Parahyba River northward to Panama.

Loricaria lima Kner, Panzerwelse, 89, 1853, Brazil.

263. Loricaria bransfordi Gill.

Isthmus of Panama.

Loricaria bransfordi Gill, Proc. Ac. Nat. Sci. Phila. 1876, 338, Empire Station, Isthmus Railway, Panama.

Subgenus PARAHEMIODON Bleeker.

Parahemiodon Bleeker, Nederl. Tijdschr. Dierk., 80, 1863 (*typus*).

264. Loricaria uracantha Kner & Steindachner.

Rio Chagres, Panama.

Loricaria uracantha Kner & Steindachner, Abh. Bayer. Ac. Wiss., 56, 1865, Rio Chagres, Panama.

Subgenus LORICARIA Linnæus.

265. Loricaria variegata Steindachner.
Rio Mamoni, Panama.
Loricaria variegata Steindachner, Flussfische Südamer., I, 15, 1879, Rio Mamoni, Panama.

Genus 85. HEMIANCISTRUS Bleeker.
Hemiancistrus Bleeker, Tijdschr. Dierk., I, 78, 1863 (*medians*).

266. Hemiancistrus guacharote (Cuvier & Valenciennes).
Porto Rico.
Hypostomus guacharote Cuvier & Valenciennes, Hist. Nat. Poiss., XV, 508, 1840, Porto Rico.

267. Hemiancistrus aspidolepis (Günther).
Veragua.
Chætostomus aspidolepis Günther, Fishes Central Amer., 478, 1869, Veragua.

Genus 86. CHÆTOSTOMUS Kner.
Chætostomus Kner, Hypostomiden, 272, 1853 (*loborhynchus*).

268. Chætostomus fischeri Steindachner. *Couchu.*
Rio Mamoni, near Panama.
Chætostomus fischeri Steindachner, Flussfische Südamer., I, 14, 1879, Rio Mamoni, Panama.

Genus 87. ANCISTRUS Kner.
Ancistrus Kner, Hypostomiden, 272, 1853 (*cirrhosus*).

269. Ancistrus chagresi Eigenmann & Eigenmann.
Rio Chagres, Panama.
Ancistrus chagresi Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1889, 47, Rio Chagres, Panama.

Order N. PLECTOSPONDYLI. The Carp-like Fishes.

Suborder EVENTOGNATHI. The Carps.

Family XXXVI. CATOSTOMIDÆ. The Suckers.

Genus 88. ~~ICTIOBUS~~ Rafinesque. ICTIOBUS ~~AMBLODON~~ Raf *Buffalo-fishes.*
Ictiobus Rafinesque, Ichth. Ohiensis, 55, 1820 (*bubalus*).

Subgenus ~~SCLEROGNATHUS~~ Cuvier & Valenciennes. Genus ~~SCLEROGNATHUS~~ Megastomatobus Fowler.
Sclerognathus Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 477, 1844 (*~~cyprinella~~*). cyprinus as type. by Agassiz
Meg ~~Sclerognathus~~

270. Ictiobus cyprinella (Cuvier & Valenciennes). *Red-mouth Buffalo-fish; Common Buffalo-fish.*
Mississippi Valley.
Sclerognathus cyprinella Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 477, 1844, Lake Pontchartrain, Louisiana.

Subgenus ~~ICTIOBUS~~ Rafinesque. ICTIOBUS

271. Ictiobus urus (Agassiz). *Mongrel Buffalo.* f. Bubalidthp
Mississippi Valley.
Carpiodes urus Agassiz, Amer. Jour. Sci. Arts 1854, 355, Tennessee River, Huntsville, Alabama.

272. Ictiobus meridionalis (Günther).
Rio Usumacinta, Guatemala.
Sclerognathus meridionalis Günther, Cat., VII, 23, 1868, Rio Usumacinta, Guatemala.

273. Ictiobus bubalus (Rafinesque). *Small-mouthed Buffalo; Razor-backed Buffalo; Sucker-mouthed Buffalo.*
Mississippi Valley and southward.
Amblodon bubalus Rafinesque, Jour. Phys. 1818, 421, Ohio River.

Genus 89. CARPIODES Rafinesque.
Carpiodes Rafinesque, Ichth. Ohiensis, 56, 1820 (*cyprinus*).

274. Carpiodes carpio (Rafinesque). *Carp Sucker.*
Ohio Valley, southwest to central Texas.
Catostomus carpio Rafinesque, Ichth. Ohiensis, 56, 1820, Falls of Ohio River.

275. Carpiodes difformis Cope.
Ohio Valley and westward.
Carpiodes difformis Cope, Proc. Am. Phil. Soc. Phila. 1870, 480, Wabash River.

276. Carpiodes thompsoni Agassiz. *Lake Carp; "Drum."*
Lake Champlain and Great Lakes region.
Carpiodes thompsoni Agassiz, Am. Jour. Sci. Arts 1855, 191, Lake Champlain.

277. Carpiodes velifer (Rafinesque). *Quillback; Spearfish; Sailfish; Skimback.*
Mississippi Valley and southwestward to Rio Grande and upper Missouri.
Catostomus velifer Rafinesque, Ichth. Ohiensis, 56, 1820, Ohio River.

278. Carpiodes cyprinus (LeSueur). *Eastern Carp Sucker.*
Streams about Chesapeake Bay.
Catostomus cyprinus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 91, Elk River and other tributaries of Chesapeake Bay.

Genus 90. CYCLEPTUS Rafinesque. *Blackhorse.*
Cycleptus Rafinesque, Jour. Phys. 1819, 421 (*nigrescens*).

279. Cycleptus elongatus (LeSueur). *Blackhorse; Gourd-seed Sucker; Missouri Sucker; Suckerel.*
Upper Mississippi Valley.
Catostomus elongatus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 103, Ohio River.

Genus 91. PANTOSTEUS Cope. *Mountain Suckers.*
Pantosteus Cope, Lieut. Wheeler's Expl. W. 100th Mer., v, 673, 1876 (*platyrhynchus*=*generosus*).

280. Pantosteus arizonæ Gilbert.
Gila Basin, Arizona.
Pantosteus arizonæ Gilbert, in Jordan & Evermann, Fish. N. and M. Amer., 170, 1896, Salt River, Tempe, Arizona.

281. Pantosteus generosus (Girard). *Mountain Sucker.*
Great Basin of Utah.
Catostomus generosus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 174, Cottonwood Creek, Utah.

282. Pantosteus plebeius (Baird & Girard).
Basin of the Rio Grande.
Catostomus plebeius Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 28, Rio Mimbres, a tributary of Lake Guzman, Chihuahua.

283. Pantosteus delphinus (Cope). *Blue-headed Sucker.*
Mountain streams tributary to the Colorado River in western Colorado and Wyoming.
Minomus delphinus Cope, Hayden's Geol. Surv. Wyoming for 1870 (1872), 435, probably Henry Fork of Green River, Wyoming.

284. Pantosteus guzmaniensis (Girard).
Streams of Coahuila and Chihuahua tributary to the Rio Grande.
Catostomus guzmaniensis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 173, Rio Janos, a tributary of Lake Guzman, Chihuahua.

be selene = dysgonis. fide Hubbs.

Notolepidomyam Fowler. type dizygnia

(need revision) see Snyder

Pantosteus santaeanae. Snyder. Proc. 1908
Riverside = Notolepidomyzo

Pantosteus virescens Cope.

type and Bear R. Utah

Pant. platyrhynchus (Cope) (Porro) = Pant

Probo. type. Series

Pant. jarrovii Cope. no type

P. lahontan

P. labiortan = Pant.

Protelepterygon. which examines with strong microscope
Pantoscelus. then examines a mite very narrow [illegible]
never quite closing

Minonus irrigans. type of Minonus.

columbianus

C. incalti = C. occidentalis

285. Pantosteus jordani Evermann.

Upper Missouri and Columbia River basins.

Pantosteus jordani Evermann, Bull. U. S. Fish Com. 1892 (January 27, 1893), 51, Whitewood Creek and other streams of the Black Hills, South Dakota.

286. Pantosteus aræopus (Jordan).

Kern River, California; Carson River and Reese River, Nevada.

Catostomus aræopus Jordan, Bull. U. S. Nat. Mus., XII, 173, 1878, Kern River, California.

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287. Pantosteus clarki (Baird & Girard).

Rio Gila and tributaries in Arizona.

Catostomus clarki Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 27, Rio Santa Cruz, Gila Basin, Arizona.

Genus 92. CATOSTOMUS LeSueur. *Fine-scaled Suckers.*

Catostomus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 89 (*catostomus*).

Subgenus CATOSTOMUS LeSueur.

288. Catostomus latipinnis Baird & Girard. *Flannel-mouthed Sucker.*

Rio Colorado and Rio Gila and their tributaries.

Catostomus latipinnis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 388, Rio San Pedro, Gila Basin.

289. Catostomus discobolus Cope.

Upper Colorado Basin.

Catostomus discobolus Cope, Hayden's Geol. Surv. Wyo., 435, 1870 (1872), Green River, Wyoming.

290. Catostomus griseus (Girard).

Platte River and upper Missouri region.

Acomus griseus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 174, Sweetwater Fork of Platte River, Wyoming.

291. Catostomus retropinnis Jordan.

Northern Montana.

Catostomus retropinnis Jordan, Bull. U. S. Nat. Mus., XII, 178, 1878, Milk River, Montana.

292. Catostomus pocatello Gilbert & Evermann. *Moogadee.*

Upper Snake River basin; the type from near Pocatello, Idaho.

Catostomus pocatello Gilbert & Evermann, Bull. U. S. Fish Com. 1894, 189, pl. 21, fig. 1, Ross Fork of Snake River, near Pocatello, Idaho.

293. Catostomus catostomus (Forster). *Long-nosed Sucker; Northern Sucker; Red Sucker.*

Great Lakes, upper Missouri River, upper Columbia, and northwestward to Alaska; very abundant northward, but not coming south of latitude 40°.

Cyprinus catostomus Forster, Phil. Trans. 1773, 155, streams about Hudson Bay.

294. Catostomus tahoensis Gill & Jordan. *Tahoe Sucker.*

Lake Tahoe and Humboldt River at Winnemucca, Nevada.

Catostomus tahoensis Gill & Jordan, in Jordan, Bull. U. S. Nat. Mus., XII, 173, 1878, Lake Tahoe, California.

295. Catostomus rex R. S. Eigenmann.

Lost River, Tule Lake, Oregon.

Catostomus rex Rosa Smith Eigenmann, Am. Nat., July, 1891, 667, Lost River, Oregon.

Subgenus DECACTYLUS Rafinesque.

Decactylus Rafinesque, Ichth. Ohiensis, 60, 1820 (*bostoniensis*=*commersonii*)

296. Catostomus labiatus Ayres.

~~Klamath Lake, Oregon~~.

Catostomus labiatus Ayres, Proc. Cal. Ac. Sci. 1855, 32, ~~Klamath Lake, Oregon~~.

Klamath Cal

297. Catostomus occidentalis Ayres. *Sacramento Sucker.*

Streams of California; Sacramento and San Joaquin rivers.

Catostomus occidentalis Ayres, Proc. Cal. Ac. Sci. 1854, 18, San Francisco.

298. Catostomus bernardini Girard.

San Bernardino Creek, a tributary of Rio Yaqui, on the boundary of Arizona and Sonora.

Catostomus bernardini Girard, Proc. Ac. Nat. Sci. Phila. 1856, 175, San Bernardino Creek, Arizona.

299. Catostomus macrocheilus Girard. *Columbia River Sucker.*

Columbia River basin as far up as Flathead Lake, Montana, Upper Salmon Falls, and the headwaters of Salmon River.

Catostomus macrocheilus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 175, Astoria, Oregon.

300. Catostomus commersonii (Lacépède). *Common Sucker; White Sucker; Brook Sucker; Fine-scaled Sucker.*

Quebec and the Great Lakes to Montana, Colorado, and southward to Missouri and Georgia.

Cyprinus commersonii Lacépède, Hist. Nat. Poiss., v, 502, 1803, locality unknown.

301. Catostomus ardens Jordan & Gilbert. *Mullet of Utah Lake.*

Great Basin of Utah and upper Snake River, Idaho.

Catostomus ardens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 464, Utah Lake, Provo, Utah.

302. Catostomus gila Kirsch. = insignis

Rio Gila, Arizona.

Catostomus gila Kirsch, Proc. U. S. Nat. Mus. 1888, 555, Rio Gila, Fort Thomas, Arizona.

303. Catostomus insignis Baird & Girard.

Gila Basin, Arizona.

Catostomus insignis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 28, Rio San Pedro, Arizona.

Genus ~~Subgenus~~ **HYPENTELIUM Rafinesque.**

Hypentelium Rafinesque, Jour. Ac. Nat. Sci. Phila. 1818, 421 (*macropterum*=*nigricans*).

304. Catostomus nigricans LeSueur. *Hog Sucker; Stone-roller; Toter; Crawl-a-bottom; Hammer Head; Stone-lugger; Hog Molly.*

New York to Minnesota, Kansas, Arkansas, and the Carolinas.

Catostomus nigricans LeSueur, Jour. Ac. Nat. Sci. Phila. 1817, 102, Lake Erie.

305. Catostomus rhothœcus Thoburn.

Eastern Tennessee or southwestern Virginia.

Catostomus rhothœcus Thoburn, in Jordan & Evermann, Fishes North and Middle America, 181, 1896, supposed to be from French Broad River, Tennessee.

Genus 93. CHASMISTES Jordan.

Chasmistes Jordan, Bull. Hayden's Geol. Surv. Terr., IV, No. 2, 417, 1878 (*liorus*).

306. Chasmistes fecundus Cope & Yarrow. *Webug Sucker.*

Utah Lake.

Catostomus fecundus Cope & Yarrow, Zool. Wheeler Surv., v, 678, 1876, Utah Lake.

307. Chasmistes brevirostris Cope.

Klamath Lake, Oregon.

Chasmistes brevirostris Cope, Am. Nat. 1879, 785, Klamath Lake, Oregon.

308. Chasmistes liorus (Jordan). *June Sucker of Utah Lake.*

Utah Lake.

Chasmistes liorus Jordan, Bull. U. S. Nat. Mus., XII, 29, 1878, Utah Lake at Provo, Utah.

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a 204.

Revised: Fowler

312. doubtful. not valid

Mopsalia allegheniensis
Nichols.
Marshall
Md.

309. Chasmistes cujus Cope. *Couia.*
Pyramid Lake, Nevada.
Chasmistes cujus Cope, Proc. Ac. Nat. Sci. Phila. 1883, 149, Pyramid Lake.

Genus 94. DELTISTES Seale.
Deltistes Seale, Proc. Cal. Ac. Sci. 1896 (*luxatus*).

310. Deltistes luxatus (Cope).
Klamath Lake and Klamath River, Oregon.
Chasmistes luxatus Cope, Am. Nat. 1879, 784, Klamath Lake.

Genus 95. XYRAUCHEN Eigenmann & Kirsch. *Razor-back Suckers.*
Xyrauchen Eigenmann & Kirsch, Proc. U. S. Nat. Mus. 1888, 556 (*cypho*).

texanus Abbott

311. Xyrauchen ~~cypho (Lockington~~). *Razor-back Sucker; Hump-backed Sucker.*
Basin of the Colorado and Gila rivers.
Catostomus cypho Lockington, Proc. Ac. Nat. Sci. Phila. 1880, 237, Colorado River at mouth of the Gila, Arizona.

312. Xyrauchen uncompahgre Jordan & Evermann.
Uncompahgre River in the Colorado basin.
Xyrauchen uncompahgre Jordan & Evermann, Bull. U. S. Fish Com. 1889 (1891), 26, Uncompahgre River, Delta, Colorado.

Genus 96. ERIMYZON Jordan. *Chub Suckers.*
Erimyzon Jordan, Bull. Buffalo Soc. Nat. Hist., 95, 1876 (*oblongus*).

313. Erimyzon sucetta (Lacépède). *Creek-fish; Chub Sucker.*
Great Lakes, Mississippi Valley, and eastward in lakes and lowland streams.
Cyprinus sucetta Lacépède, Hist. Nat. Poiss., v, 606, 1803, South Carolina.

313a. Erimyzon sucetta oblongus (Mitchill).
Great Lakes region to Maine and Dakota, south to Virginia and Indian Territory.
Cyprinus oblongus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 459, New York.

Genus 97. MINYTREMA Jordan. *Spotted Suckers.*
Minytrema Jordan, Man. Vert. E. U. S., ed. 2, 318, 1878 (*melanops*).

314. Minytrema melanops (Rafinesque). *Winter Sucker; Spotted Sucker.*
Great Lakes region to North Carolina, west to Texas.
Catostomus melanops Rafinesque, Ichth. Ohiensis, 57, 1820, Ohio River.

Genus 98. MOXOSTOMA Rafinesque. *Redhorse.*
Moxostoma Rafinesque, Ichth. Ohiensis, 54, 1820 (*anisurum*).

315. Moxostoma papillosum (Cope). *White Mullet.*
Dismal Swamp in Virginia to the Ocmulgee River, Georgia.
Ptychostomus papillosus Cope, Proc. Am. Phil. Soc. Phila. 1870, 470, Catawba and Yadkin rivers, North Carolina.

316. Moxostoma anisurum (Rafinesque). *White-nosed Sucker.*
Ohio River and Great Lakes region.
Catostomus anisurus Rafinesque, Ichth. Ohiensis, 54, 1820, Ohio River.

317. Moxostoma collapsum (Cope).
Lowland streams of North Carolina.
Ptychostomus collapsus Cope, Proc. Am. Phil. Soc. 1870, 471, Neuse, Yadkin, and Catawba rivers, North Carolina.

318. Moxostoma bucco (Cope).
Missouri River at St. Joseph.
Ptychostomus bucco Cope, Hayden's Geol. Surv. Wyo., 437, 1872, St. Joseph, Mo.

319. Moxostoma pidiense (Cope).

Great Pedee Basin.

Ptychostomus pidiensis Cope, Proc. Am. Phil. Soc. Phila. 1870, 471, Yadkin River, North Carolina.

320. Moxostoma coregonus (Cope). *Blue Mullet.*

Catawba and Yadkin rivers, North Carolina.

Ptychostomus coregonus Cope, Proc. Am. Phil. Soc. Phila. 1870, 472, Catawba and Yadkin rivers.

321. Moxostoma album (Cope).

Rivers of North Carolina.

Ptychostomus albus Cope, Proc. Am. Phil. Soc. Phila. 1870, 472, Catawba River.

322. Moxostoma thalassinum (Cope).

Yadkin River, North Carolina.

Ptychostomus thalassinus Cope, Proc. Am. Phil. Soc. Phila. 1870, 472, Yadkin River, North Carolina.

323. Moxostoma congestum (Baird & Girard). *Texas Redhorse.*

Streams of Texas.

Catostomus congestus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 27, Rio Salado, Texas.

324. Moxostoma austrinum Bean.

Rio de Santiago, Mexico, known from Michoacan, Mexico (west of Sierra Madre); Rio Lerma, at Salamanca.

Myxostoma austrinum Bean, Proc. U. S. Nat. Mus. 1879, 302, Piedad in Morelia, Michoacan, Mexico.

325. Moxostoma aureolum (LeSueur). *Common Redhorse; Mullet; White Sucker; Large-scaled Sucker.*

Great Lakes, Mississippi Valley, and other streams west of the Allegheny Mountains, and west to the Dakotas and Manitoba.

Catostomus aureolus LeSueur, Jour. Ac. Nat. Sci. Phila., 1, 1817, 95, Lake Erie, near Buffalo, New York.

326. Moxostoma robustum (Cope).

Yadkin River, North Carolina.

Ptychostomus robustus Cope, Proc. Am. Phil. Soc. Phila. 1870, 473, Yadkin River.

327. Moxostoma macrolepidotum (LeSueur).

Streams about Chesapeake and Delaware bays, and southward to North Carolina, east of the Alleghanies.

Catostomus macrolepidotus LeSueur, Jour. Ac. Nat. Sci. Phila., 1, 1817, 94, Delaware River.

328. Moxostoma crassilabre (Cope).

Streams of eastern North Carolina.

Ptychostomus crassilabris Cope, Proc. Am. Phil. Soc. Phila. 1879, 477, Neuse River, Raleigh, North Carolina.

329. Moxostoma lesueurii (Richardson). *Picconou.*

Pine Island Lake and Albany River, British America.

Catostomus lesueurii Richardson, Franklin's Journal, 1823, 772, Pine Island Lake, British America.

330. Moxostoma breviceps (Cope).

Ohio Valley and Great Lakes region.

Ptychostomus breviceps Cope, Proc. Am. Phil. Soc. Phila. 1870, 478, Youghiogheny River, Pennsylvania.

331. Moxostoma conus (Cope).

Neuse and Yadkin rivers, North Carolina.

Ptychostomus conus Cope, Proc. Am. Phil. Soc. Phila. 1870, 478, Yadkin River.

N.H. Fowler.

[illegible] = [illegible] or [illegible]

332. Moxostoma pœcilurum Jordan.

Southern Mississippi to eastern Texas; Pearl, Tangipahoa, and Sabine rivers.

Myxostoma pœcilura Jordan, Bull. U. S. Nat. Mus., x, 66, 1877, Tangipahoa River, Louisiana.

333. Moxostoma rupiscartes Jordan & Jenkins. *Jump-rocks.*

Rivers of the Carolinas and Georgia from the Catawba to the Chattahoochee River.

Moxostoma rupiscartes Jordan & Jenkins, Proc. U. S. Nat. Mus. 1888, 353, Catawba River, at Marion, N. C., and other streams in North and South Carolina.

334. Moxostoma cervinum (Cope). *Jumping Mullet.*

Rivers of the South Atlantic States from the James to the Neuse.

Teretulus cervinus Cope, Jour. Ac. Nat. Sci. Phila. 1868, 236, headwaters of Roanoke and James rivers, Virginia.

Genus 99. PLACOPHARYNX Cope.

Placopharynx Cope, Proc. Am. Phil. Soc. Phila. 1870, 467 (*carinatus* = *duquesnii*).

335. Placopharynx ~~duquesnii (LeSueur)~~. carinatus Cope.

Michigan (Detroit) to Tennessee, Georgia, and Arkansas.

Catostomus duquesnii LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 105, Ohio River at Pittsburg.

Genus 100. LAGOCHILA Jordan & Brayton. *Rabbit-mouth Suckers.*

Lagochila Jordan & Brayton, Proc. Ac. Nat. Sci. Phila. 1877, 280 (*lacera*).

336. Lagochila lacera Jordan & Brayton. *Hare-lip Sucker; Cut-lips; Split-mouth Sucker; May Sucker; Rabbit-mouth Sucker; Pea-lip Sucker.*

Mississippi Valley, Ozark Mountains, Scioto, Tippecanoe, Clinch, Cumberland and Chickamauga rivers, and the White River of Arkansas.

Lagochila lacera Jordan & Brayton, Proc. Ac. Nat. Sci. Phila. 1877, 280, Chickamauga River, Ringgold, Georgia.

Family XXXVII. CYPRINIDÆ. The Carps.

Genus 101. CAMPOSTOMA Agassiz. *Stone-rollers.*

Campostoma Agassiz, Am. Jour. Sci. Arts 1855, 218 (*anomalum*).

337. Campostoma ornatum Girard.

Chihuahua River, Mexico.

Campostoma ornatum Girard, Proc. Ac. Nat. Sci. Phila. 1856, 176, Chihuahua River, Mexico.

338. Campostoma pricei Jordan & Thoburn.

Springs in the Chiricahua Mountains in southern Arizona, tributary to the Rio Yaqui.

Campostoma pricei Jordan & Thoburn, in Jordan & Evermann, Fishes North and Middle America, 205, 1896, Rucker Canyon, Chiricahua Mountains, Arizona.

339. Campostoma anomalum (Rafinesque). *Stone-roller; Stone-lugger; Steel-backed Chub; Mammy; Dough-belly.*

Central New York to Tennessee, Wyoming, and Texas.

Rutilus anomalus Rafinesque, Ichth. Ohiensis, 52, 1820, Licking River, Kentucky.

340. Campostoma formosulum Girard.

San Antonio River to the Rio Grande.

Campostoma formosulum Girard, Proc. Ac. Nat. Sci. Phila. 1856, 176, Rio Sabinal, near San Antonio, Texas.

Genus 102. ORTHODON Girard.

Orthodon Girard, Proc. Ac. Nat. Sci. Phila. 1856, 182 (*microlepidota*).

341. Orthodon microlepidotus (Ayres). *Blackfish.*

Lower Sacramento and San Joaquin rivers.

Gila microlepidota Ayres, Proc. Cal. Ac. Sci., I, 1855, 21, Sacramento and San Joaquin rivers, California.

Genus 103. OXYGENEUM Forbes.

Oxygeneum Forbes, Bull. Ill. Lab. Nat. Hist., II, 136, 1885 (*pulverulentum*).

342. Oxygeneum pulverulentum Forbes.

Illinois River.

Oxygeneum pulverulentum Forbes, Bull. Ill. Lab., II, 136, 1885, Illinois River.

Genus 104. ACROCHEILUS Agassiz. *Chisel-mouths.*

Acrocheilus Agassiz, Am. Jour. Sci. Arts 1855, 211 (*alutaceus*).

343. Acrocheilus alutaceus Agassiz & Pickering. *Chisel-mouth; Square-mouth; Hard-mouth.*

Lower Columbia River, as far up as Spokane and Shoshone Falls.

Acrocheilus alutaceus Agassiz & Pickering, Am. Jour. Sci. Arts, XIX, 1855, 214, Willamette Falls and Walla Walla River, Oregon.

Genus 105. LAVINIA Girard.

Lavinia Girard, Proc. Ac. Nat. Sci. Phila. 1854, 137 (*exilicauda*).

344. Lavinia exilicauda Baird & Girard. *Hitch; Chi.*

Streams of the Coast Range about San Francisco and Monterey; locally common as far north as Clear Lake, California.

Lavinia exilicauda Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 137, Sacramento River, California.

Genus 106. CHROSOMUS Rafinesque.

Chrosomus Rafinesque, Ichth. Ohiensis, 47, 1820 (*erythrogaster*).

345. Chrosomus erythrogaster Rafinesque. *Red-bellied Dace.*

New Brunswick to Ohio, Michigan, Iowa, and northern Alabama.

Chrosomus erythrogaster Rafinesque, Ichth. Ohiensis, 47, 1820, Ohio River.

345a. Chrosomus erythrogaster eos Cope.

Susquehanna River.

Chrosomus eos Cope, Proc. Ac. Nat. Sci. Phila. 1861, 523, Meshoppen Creek, Susquehanna County, Pennsylvania.

346. Chrosomus dakotensis Evermann & Cox.

Missouri River basin in Nebraska and South Dakota.

Chrosomus dakotensis Evermann & Cox, Report U. S. Fish Com. 1894 (1896) 395, Crow Creek, Chamberlain, South Dakota.

347. Chrosomus oreas Cope.

Headwaters of Roanoke River, and clear tributaries of the Tennessee River.

Chrosomus oreas Cope, Jour. Ac. Nat. Sci. Phila. 1868, 233, head of Roanoke River, Montgomery County, Virginia.

Genus 107. ALGANSEA Girard.

Algansea Girard, Proc. Ac. Nat. Sci. Phila. 1856, 184 (*tincella*).

348. Algansea tincella (Cuvier & Valenciennes).

Lakes about the City of Mexico.

Leuciscus tincella Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 323, 1844, City of Mexico.

349. Algansea lacustris Steindachner.

Lake Pátzcuaro, Mexico.

Algansea lacustris Steindachner, Einige Fischarten Mexico's, 10, pl. 3, figs. 1–1*b*, 1895, Lake Pátzcuaro, near City of Mexico.

Orchodon & Ranchilus only Chondrostoncelinae

350. Algansea tarascorum Steindachner.
Lake Pátzcuaro, Mexico.
Algansea tarascorum Steindachner, Einige Fischarten Mexico's, 11, pl. 3, figs. 2–2c, Lake Pátzcuaro, near City of Mexico.

351. Algansea dugesi Bean.
Central Mexico, in streams tributary to Rio de Lerma.
Algansea dugesi Bean, Proc. U. S. Nat. Mus. 1892, 283, Lake Yuriria, Guanajuato, Mexico.

352. Algansea sallæi (Günther).
Streams of central Mexico.
Ceratichthys sallæi Günther, Cat., VII, 484, 1868, Cuernavaca, Mexico.

Genus 108. HYBOGNATHUS Agassiz.
Hybognathus Agassiz, Am. Jour. Sci. Arts 1855, 223 (*nuchalis*).

Subgenus HYBOGNATHUS Agassiz. is Genuine

353. Hybognathus nuchale Agassiz. *Silvery Minnow; Gudgeon.*
Clear streams from Delaware and Neuse rivers to Nebraska and southward to Georgia and Texas.
Hybognathus nuchalis Agassiz, Am. Jour. Sci. Arts 1855, 224, Quincy, Illinois.

353a. Hybognathus nuchale evansi (Girard).
Upper Missouri Basin
Hybognathus evansi Girard, Proc. Ac. Nat. Sci. Phila. 1856, 182, Fort Pierre, Nebraska.

354. Hybognathus argyrite Girard.
Upper Missouri region and Red River of the North.
Hybognathus argyritis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 182, Milk River.

355. Hybognathus hayi Jordan.
Lower Mississippi Valley and neighboring rivers in Mississippi.
Hybognathus hayi Jordan, Proc. U. S. Nat. Mus. 1884, 548, Pearl River, Miss.

Subgenus DIONDA Girard.
Dionda Girard, Proc. Ac. Nat. Sci. Phila. 1856, 177 (*episcopa*).

356. Hybognathus serenum (Girard).
Rivers of western Texas.
Dionda serena Girard, Proc. Ac. Nat. Sci. Phila. 1856, 177, Sabinal River, Texas.

357. Hybognathus episcopum (Girard).
Rivers of western Texas and northeastern Mexico from Rio Comal to Rio Grande.
Dionda episcopa Girard, Proc. Ac. Nat. Sci. Phila. 1856, 177, headwaters of Pecos River, and Comanche Spring, tributary to Rio Grande, Texas.

358. Hybognathus nubilum (Forbes).
Western Illinois, west to Wyoming and southwest to the Ozark region.
Alburnops nubilus Forbes, Bull. Ill. Lab. Nat. Hist., II, 56, 1878, Rock River, Ogle County, Illinois.

359. Hybognathus amarum (Girard).
Rio Grande Basin.
Algoma amara Girard, Proc. Ac. Nat. Sci. Phila. 1856, 180, lagoon near Fort Brown, Texas.

360. Hybognathus melanops (Girard).
Streams of Coahuila, Chihuahua, and Nuevo Leon, Mexico.
Dionda melanops Girard, Proc. Ac. Nat. Sci. Phila. 1856, 178, Buena Vista, Coahuila, Mexico.

361. Hybognathus plumbeum (Girard).
Tributaries of Arkansas River in Indian Territory.
Dionda plumbea Girard, Proc. Ac. Nat. Sci. Phila. 1856, 178, Canadian River.

Genus 109. PIMEPHALES Rafinesque. *Fat-heads.*

Pimephales Rafinesque, Ichth. Ohiensis, 52, 1820 (*promelas*).

362. Pimephales promelas Rafinesque. *Fat-head; Black-head Minnow.*

Lake Champlain to Kentucky, the Dakotas, and Rio Grande.

Pimephales promelas Rafinesque, Ichth. Ohiensis, 53, 1820, pond near Lexington, Kentucky.

362a. Pimephales promelas maculosus (Girard).

Arkansas River; locally abundant.

Pimephales maculosus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 180, sluices of Arkansas River, Fort Makee, Arkansas.

362b. Pimephales promelas confertus (Girard).

Upper Rio Grande Basin; Chihuahua River, Mexico.

Hyborhynchus confertus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 179, Hurrah Creek, a tributary of Pecos River, Texas.

363. Pimephales notatus (Rafinesque). *Blunt-nosed Minnow.*

Generally very abundant in small streams west of the Alleghanies and in the St. Lawrence River basin.

Minnilus notatus Rafinesque, Ichth. Ohiensis, 47, 1820, Ohio River.

Genus 110. MYLOPHARODON Ayres.

Mylopharodon Ayres, Proc. Cal. Ac. Sci. 1855, 33 (*robustus* = *conocephalus*).

364. Mylopharodon conocephalus (Baird & Girard).

Sacramento and San Joaquin rivers, California.

Gila conocephala Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 134, San Joaquin River, California.

Genus 111. MYLOCHEILUS Agassiz.

Mylocheilus Agassiz, Am. Jour. Sci. Arts 1855, 229 (*lateralis* = *caurinus*).

365. Mylocheilus caurinus (Richardson). *Columbia Chub.*

Streams of Oregon and Washington from Frazer River to the Columbia.

Cyprinus (*Leuciscus*) *caurinus* Richardson, Fauna Boreali-Amer., III, 304, 1836, Columbia River at Fort Vancouver.

Genus 112. STYPODON Garman.

Stypodon Garman, Bull. Mus. Comp. Zool., VIII, 90, 1881 (*signifer*).

366. Stypodon signifer Garman.

Lago de Parras, an isolated lagoon in Coahuila, Mexico.

Stypodon signifer Garman, Bull. Mus. Comp. Zool., VIII, 90, 1881, Lago de Parras, Coahuila, Mexico.

Genus 113. SEMOTILUS Rafinesque. *Fall-fishes.*

Semotilus Rafinesque, Ichth. Ohiensis, 49, 1820 (*dorsalis* = *atromaculatus*).

Subgenus LEUCOSOMUS Heckel.

Leucosomus Heckel, Russegger's Reisen, I, 1042, 1843 ("*chrysoleucus*" = *corporalis*).

367. Semotilus corporalis (Mitchill). *Fall-fish; Silver Chub; Wind-fish; Corporal.*

Abundant from St. Lawrence River to the James, east of the Alleghanies.

Cyprinus corporalis Mitchill, Amer. Month. Mag., I, July, 1817, 289, Wallkill River, New York.

Subgenus SEMOTILUS Rafinesque.

368. Semotilus atromaculatus (Mitchill). *Horned Dace; Creek Chub.*

Maine and western Massachusetts, westward to Kansas and Wyoming.

Cyprinus atromaculatus Mitchill, Amer. Month. Mag., II, 1818, 324, Wallkill River, New York.

= Spinicephalus fibulatus Le Sueur. Vaillant
Bull Soc Philom, 1896. VIII,
fig. 14 mult pl. 26. (Planches
inédites de Le Sueur)

Phycehoacharlus grandis Agassiz
Sacramento etc. good sp.

3°11 = grandes probably.
Pt. umpquae ?

368a. Semotilus atromaculatus thoreauianus (Jordan).
Streams of Georgia and Alabama.
Semotilus thoreauianus Jordan, Bull. U. S. Nat. Mus., x, 63, 1877, Flint River, Georgia.

Genus 114. POGONICHTHYS Girard.
Pogonichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 136 (*inæquilobus*=*macrolepidotus*).

369. Pogonichthys macrolepidotus (Ayres). *Split-tail.*
Lowland streams of California.
Leuciscus macrolepidotus Ayres, Placer Times and Transcript, May 30, 1854, San Francisco.

Genus 115. PTYCHOCHEILUS Agassiz.
Ptychocheilus Agassiz, Am. Jour. Sci. Arts 1855, 229 (*gracilis*=*oregonensis*).

370. Ptychocheilus oregonensis (Richardson). *Squawfish; Chappaul; Yellowbelly; Sacramento Pike.*
Rivers of Oregon and Washington, in the Columbia basin to Montana and Idaho, and northward to British Columbia; also in the Sacramento, San Joaquin, Salinas, and Pajaro rivers of California.
Cyprinus (*Leuciscus*) *oregonensis* Richardson, Fauna Bor.-Amer., III, 305, 1836, Columbia River.

371. Ptychocheilus harfordi Jordan & Gilbert.
Lower Sacramento River, California.
Ptychochilus harfordi Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 72, Sacramento River, California.

372. Ptychocheilus lucius Girard. *"White Salmon" of the Colorado.*
Colorado Basin; abundant.
Ptychocheilus lucius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 209, Rio Colorado.

Genus 116. GILA Baird & Girard.
Gila Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 368 (*robusta*).

373. Gila elegans Baird & Girard. *Bony-tail; "Gila Trout."*
Colorado and Gila rivers.
Gila elegans Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 369, Zuñi, Colorado, and Gila rivers.

374. Gila robusta Baird & Girard. *Round-tail.*
Tributaries of the Rio Colorado and Rio Gila.
Gila robusta Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 368, Zuñi River, New Mexico.

375. Gila seminuda Cope & Yarrow. x elegans
Rio Virgen, in Utah and Nevada.
Gila seminuda Cope & Yarrow, Zool. Wheeler's Expl. W. 100th Mer., v, 666, 1875 (1876), Rio Virgen, Nevada.

Genus 117. ~~LEUCISCUS Cuvier.~~ Richardsonius
Leuciscus (Klein) Cuvier, Règne Animal, ed. I, 194, 1817 (*dobula, rutilus, leuciscus, alburnus,* and *phoxinus*).

~~Subgenus~~ SIBOMA Girard.
Siboma Girard, Proc. Ac. Nat. Sci. Phila. 1856, 208 (*crassicauda*).

376. Leuciscus crassicauda (Baird & Girard). *Sacramento Chub.*
Rivers of California; generally abundant in the Sacramento and San Joaquin.
Lavinia crassicauda Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 137, San Joaquin River, California.

Subgenus TIGOMA Girard.

Tigoma Girard, Proc. Ac. Nat. Sci. Phila. 1856, 205 (*pulchella*=*nigrescens*).

377. Leuciscus conformis (Baird & Girard).

Tulare Valley, California.

Lavinia conformis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 137, Poso Creek, Tulare County, California.

378. Leuciscus bicolor (Girard).

Klamath Lake, Oregon.

Tigoma bicolor Girard, Proc. Ac. Nat. Sci. Phila. 1856, 206, Klamath Lake, Oregon.

379. Leuciscus lineatus (Girard). *Great Chub; Chub of Utah Lake.*

Great Basin of Utah, and Snake River basin above Shoshone Falls.

Tigoma lineata Girard, Proc. Ac. Nat. Sci. Phila. 1856, 206, locality unknown.

380. Leuciscus nigrescens (Girard). *Pescadito; Chub of the Rio Grande.*

Rio Grande Basin.

Tigoma nigrescens Girard, Proc. Ac. Nat. Sci. Phila. 1856, 207, Boca Grande and Rio Janos, Chihuahua.

381. Leuciscus purpureus (Girard).

San Bernardino Creek in southern Arizona, a tributary of Rio Yaqui.

Tigoma purpurea Girard, Proc. Ac. Nat. Sci. Phila. 1856, 206, San Bernardino Creek, Arizona.

382. Leuciscus intermedius (Girard).

Basin of the Gila River, Arizona.

Tigoma intermedia Girard, Proc. Ac. Nat. Sci. Phila. 1856, 206, Rio San Pedro of the Gila, Arizona.

383. Leuciscus niger (Cope).

Rio Gila, Arizona.

Gila nigra Cope, Zool. Wheeler's Expl. W. 100th Mer., v, 663, 1875 (1876), Ash Creek and San Carlos, Arizona.

384. Leuciscus alicæ (Jouy). *Leather-sided Minnow.*

Great Basin of Utah and Wood River, Idaho.

Squalius alicæ Jouy, Proc. U. S. Nat. Mus. 1881, 19, Provo River near Utah Lake, Utah.

Subgenus CHEONDA Girard.

Cheonda Girard, Proc. Ac. Nat. Sci. Phila. 1856, 207 (*cooperi*).

385. Leuciscus cooperi (Girard).

Lower Columbia River basin.

Cheonda cooperi Girard, Proc. Ac. Nat. Sci. Phila. 1856, 207, Fort Vancouver, Washington.

386. Leuciscus humboldti (Girard).

Humboldt River, Nevada.

Tigoma humboldti Girard, Proc. Ac. Nat. Sci. Phila. 1856, 206, Humboldt River, Nevada.

387. Leuciscus egregius (Girard).

Nevada to northern California; known from the Humboldt and Truckee basins and from Napa Valley, California.

Tigoma egregia Girard, Pac. R. R. Surv., x, 291, 1858, locality unknown.

388. Leuciscus hydrophlox (Cope). *Silver-sided Minnow; "Po-he-wa."*

Salt Lake Basin and upper Snake River.

Clinostomus hydrophlox Cope, Hayden's Geol. Surv. Mont. for 1871 (1872), 475, Blackfoot Creek, Idaho.

should stand as a transcript. Snyder
limicolus, type and locality lost. a slender
form, like egregius.
a transcript from Pangnitch or
Fish Springs, Tooele Co. Utah.

valid

Rio Santa Cruz, Ariz.
Fish Creek
gibbus. nigra and intermedia are the same.

gracilis lost. loc. uncertain. unidentifiable.

Lemiscus nachtriebi Cox. Minnesota

loc. uncertain

probably Smiley on the Humboldt

See Snyder Proc. 49.59.

Cyprinus bartonius from
..... Berton Mine Mo.
Le Sueur in Vaillant. B.S. Philom
1896. 28.
plate incl.
= ? neogaeus,

Subgenus RICHARDSONIUS Girard.

Richardsonius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 201 (*balteatus*).

389. Leuciscus balteatus (Richardson).

Columbia and Frazer rivers, and streams about Puget Sound.

Cyprinus (*Abramis*) *balteatus* Richardson, Fauna Bor.-Amer., III, 301, 1836, Columbia River.

Subgenus CLINOSTOMUS Girard.

Clinostomus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 211 (*elongatus*).

390. Leuciscus vandoisulus Cuvier & Valenciennes.

Streams east of the Alleghenies from Virginia to Georgia and in the Tennessee and Cumberland rivers.

Leuciscus vandoisulus Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 317, 1844, South Carolina.

391. Leuciscus elongatus (Kirtland). *Red-sided Shiner.*

Great Lakes and Upper Mississippi Valley.

Luxilus elongatus Kirtland, Rept. Zool. Ohio, 169, 1836, Mahoning River, Trumbull County, Ohio, and Lake Erie near Cleveland.

Subgenus PHOXINUS Rafinesque. margaritus Cockerell.

Phoxinus Rafinesque, Ichth. Ohiensis, 45, 1820 (no type stated, *phoxinus* understood).

392. Leuciscus nachtriebi Cox.

Lakes in Mississippi Valley in Minnesota.

Leuciscus nachtriebi Cox, Rept. U. S. Fish Com. 1894 (1896), Mille Lacs, Aitkin County, Minnesota.

P. neogaeus Jordan

393. Leuciscus neogæus (Cope).

Upper Mississippi Valley and neighboring waters.

Phoxinus neogæus Cope, Cypr. Penn., 375, 1866, New Hudson, Michigan.

394. Leuciscus margarita (Cope). Margaritus Cockerell,

Susquehanna River to James River and headwaters of the Kanawha.

Clinostomus margarita Cope, Cypr. Penn., 377, 1866, Conestoga River, Lancaster, Pennsylvania.

Temeculia Cockerell,

395. Leuciscus orcutti (Eigenmann & Eigenmann).

Temecula, San Luis Rey, San Jacinto, and Santa Ana rivers, California.

Phoxinus orcutti Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., 2d series, III, 1890, 2, Temecula River, Riverside County, California.

Subgenus HEMITREMIA Cope.

Hemitremia Cope, Proc. Amer. Philos. Soc. 1870, 462 (*vittata* = *flammeus*).

396. Leuciscus milnerianus (Cope).

Upper Missouri River basin.

Phoxinus milnerianus Cope, Am. Nat., July, 1879, 440, upper Missouri River basin, probably Battle Creek, Montana.

vittata

397. Leuciscus flammeus (Jordan & Gilbert).

Tributaries of Tennessee River; common in clear streams in northern Alabama.

Phoxinus flammeus Jordan & Gilbert, in Jordan, Man. Vert. E. U. S., ed. 2, 303, 1878, Elk River, Estill Springs, Tennessee.

Subgenus IOTICHTHYS Jordan & Evermann.

Iotichthys Jordan & Evermann, Fishes North and Middle America, 228, 1896 (*phlegethontis*).

398. Leuciscus phlegethontis (Cope).

Tributaries of Great Salt Lake and Sevier Lake, Utah.

Clinostomus phlegethontis Cope, Proc. Amer. Philos. Soc. Phila. 1874, 137, Beaver River, Utah.

Genus 118. RUTILUS Rafinesque. *The Roaches.*

Rutilus Rafinesque, Ichth. Ohiensis, 48, 50, 1820 (*rutilus*).

Subgenus LEUCOS Heckel.

Leucos Heckel, Russegger's Reisen, 1, 1038, 1843 (*cisalpinus*).

399. Rutilus olivaceus (Cope).

Lake Tahoe; Pyramid Lake.

Leucus olivaceus Cope, Proc. Ac. Nat. Sci. Phila. 1883, 145, Pyramid Lake, Nevada.

Subgenus MYLOLEUCUS Cope.

Myloleucus Cope, Bull. Hayden's Geol. Surv. Mont. for 1871 (1872), 475 (*pulverulentus* = *symmetricus*).

400. Rutilus bicolor (Girard).

Lakes of southeastern Oregon (Klamath, Warner, Goose, etc.).

Algansea bicolor Girard, Proc. Ac. Nat. Sci. Phila. 1856, 183, Klamath Lake, Oregon.

401. Rutilus symmetricus (Baird & Girard).

Rivers of California and Nevada.

Pogonichthys symmetricus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 136, Fort Miller, San Joaquin Valley, California.

402. Rutilus boucardi (Günther).

Cuernavaca, Mexico.

Leuciscus boucardi Günther, Cat., VII, 485, 1868, Cuernavaca, Mexico.

403. Rutilus thoburni Scofield.

Rio San Lorenzo, Santa Cruz, California.

Rutilus thoburni Scofield, Proc. Cal. Ac. Sci. 1896, Santa Cruz, California.

404. Rutilus columbianus Scofield.

Lower Columbia Basin.

Rutilus columbianus Scofield, Proc. Cal. Ac. Sci. 1896, Lower Columbia Basin.

Genus 119. LUXILINUS Jordan.

Luxilinus Jordan, Catalogue Fishes N. A., 33, 1885 (*occidentalis*).

405. Luxilinus occidentalis (Baird & Girard).

San Joaquin Valley, California.

Leucosomus occidentalis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 137, Poso Creek and Four Creeks, tributaries of Tulare Lake, California.

Genus 120. OPSOPŒODUS Hay.

Opsopœodus Hay, Proc. U. S. Nat. Mus. 1880, 507 (*emiliæ*).

Subgenus OPSOPŒODUS Hay.

406. Opsopœodus osculus Evermann.

Rio Neches and other streams about Palestine and Houston, Texas.

Opsopœodus osculus Evermann, Bull. U. S. Fish Com. 1891 (1892), 82, Neches River, near Palestine, Texas.

407. Opsopœodus emiliæ Hay.

Lake Erie and southern Indiana to Georgia and Mississippi.

Opsopœodus emiliæ Hay, Proc. U. S. Nat. Mus. 1880, 507, Artesia, Macon, and Enterprise, Mississippi.

408. Opsopœodus megalops (Forbes).

Western Ohio to Illinois.

Trycherodon megalops Forbes, in Jordan & Gilbert, Synopsis, 247, 1883, Illinois River at Pekin and Peoria, Illinois.

Siphalates etc
Hesperolaucus
Lencadium per Snyder.

no value.

Obscura. a sp. Siphalates
Humboldt. probably

Rufilius Scapiards. Dorcus ing. hibu

Luxilinus = young ♀
Lavinia exilicauda

rare?

Subgenus OPSOPŒA Jordan & Evermann.

Opsopœa Jordan & Evermann, Fishes North and Middle America, 247, 1896 (*bollmani*).

409. Opsopœodus bollmani Gilbert.

Swamp streams of Georgia, and Obion River, Cypress, Tennessee.
Opsopœodus bollmani Gilbert, Bull. U. S. Fish Com., VIII, 1888 (1890), 226, Buckland Creek, Millen, Georgia.

Genus 121. ABRAMIS Cuvier. NOTEMIGONUS. BRAMA K replace Abra

Abramis Cuvier, Règne Animal, ed. I, 111, 1817 (*brama*).

Subgenus NOTEMIGONUS Rafinesque.

Notemigonus Rafinesque, Jour. Phys. 1819, 421 (*auratus*).

410. Abramis crysoleucas (Mitchill). *Golden Shiner; Roach; Bream.*

Nova Scotia and Maryland to Dakota and Texas.
Cyprinus crysoleucas Mitchill, Rept. Fish. N. Y., 23, 1814, New York.

410a. Abramis crysoleucas bosci (Cuvier & Valenciennes).

Rivers of the South Atlantic States.
Leuciscus bosci Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 313, 1844, Carolina, Pennsylvania, and New York.

411. Abramis gardoneus (Cuvier & Valenciennes).

South Carolina.
Leuciscus gardoneus Cuvier & Valenciennes, Hist. Nat. Poiss., XVII, 316, 1844, Charleston, South Carolina.

Genus 122. COCHLOGNATHUS Baird & Girard.

Cochlognathus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 158 (*ornatum*).

412. Cochlognathus ornatum Baird & Girard.

Rio Grande basin.
Cochlognathus ornatus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 158, Brownsville, Texas.

413. Cochlognathus biguttatum Cope.

Trinity River, Texas.
Cochlognathus biguttata Cope, Bull. U. S. Nat. Mus., XVII, 37, 1880, Trinity River, Fort Worth, Texas.

Genus 123. CLIOLA Girard. Ceratichthys B&G.

Cliola Girard, Proc. Ac. Nat. Sci. Phila. 1856, 192 (*vigilax*).

414. Cliola vigilax (Baird & Girard).

Ohio to Georgia, Iowa, and Texas.
Ceratichthys vigilax Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 390, Otter Creek, North Fork of Red River, Arkansas.

415. Cliola smithii Evermann & Cox.

Prairie Creek near Scotland, South Dakota.
Cliola smithii Evermann & Cox, Rept. U. S. Fish Com. 1894 (1896), 400, Prairie Creek, Scotland, South Dakota.

Genus 124. NOTROPIS Rafinesque.

Notropis Rafinesque, Amer. Month. Mag., II, 1818, 204 (*atherinoides*).

Subgenus AZTECA Jordan & Evermann. Ut. A

Azteca Jordan & Evermann, Fishes North and Middle America, 254, 1896 (*rittata* = *aztecus*).

416. Notropis aztecus Woolman.

Valley of Mexico.
Notropis aztecus Woolman, Bull. U. S. Fish Com., XIV, 1894, 63, City of Mexico.

Subgenus CHRIOPE Jordan.

Chriope Jordan, Bull. Hayden's Surv. Terr., IV, 787, 1878 (*bifrenatus*).

417. Notropis bifrenatus (Cope).

Massachusetts to Maryland.

Hybopsis bifrenatus Cope, Cypr. Penn., 384, 1866, Schuylkill River, Conshohocken, Pennsylvania.

418. Notropis maculatus (Hay).

Chickasawha River, Mississippi.

Hemitremia maculata Hay, Proc. U. S. Nat. Mus. 1880, 505, Chickasawha River, Enterprise, Mississippi.

419. Notropis anogenus Forbes.

Western New York (Cayuga Lake) to northern Illinois.

Notropis anogenus Forbes, Bull. Ill. Lab. Nat. Hist., vol. II, art. 2, 138, 1885, Fox River, McHenry, Illinois.

420. Notropis cayuga Meek.

Connecticut River, Northern New York, and Upper Mississippi Valley.

Notropis cayuga Meek, Ann. Lyc. Nat. Hist. N. Y. 1888, 305, Cayuga Lake, New York.

420a. Notropis cayuga atrocaudalis Evermann.

Rio Neches, Palestine, Texas; also in Rio Comal at New Braunfels, Texas.

Notropis cayuga atrocaudalis Evermann, Bull. U. S. Fish. Com., XI, 1891 (1892), 76, Neches River, Palestine, Texas.

421. Notropis heterodon (Cope).

New York to Michigan and Kansas.

Alburnops heterodon Cope, Proc. Ac. Nat. Sci. Phila. 1864, 281, Lansing and Grosse Isle, Michigan.

HYBOPSIS

Subgenus ALBURNOPS Girard.

Alburnops Girard, Proc. Ac. Nat. Sci. Phila. 1856, 194 (*blennius*).

422. Notropis fretensis (Cope).

Detroit River, Michigan.

Hybopsis fretensis Cope, Cypr. Penn., 382, 1866, Detroit, Michigan.

423. Notropis blennius (Girard). *Straw-colored Minnow.*

Ohio and Michigan to Tennessee, Dakota, and Kansas, thence southwestward to Texas.

Alburnops blennius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 194, Arkansas River near Fort Smith, Arkansas.

424. Notropis sabinæ Jordan & Gilbert.

Sabine River, Texas.

Notropis sabinæ Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 15, Sabine River at Longview, Texas.

425. Notropis volucellus (Cope).

Michigan, Wisconsin, and northern Indiana.

Hybognathus volucellus Cope, Proc. Ac. Nat. Sci. Phila. 1864, 283, Grosse Isle, Detroit River, Michigan.

426. Notropis scylla (Cope).

Illinois River to western Kansas and Montana.

Hybopsis scylla Cope, Hayden's Geol. Surv. Wyo. for 1870 (1871), 438, Red Cloud Creek, tributary of Platte River, Nebraska.

427. Notropis procne (Cope).

Delaware River and southward, in coastwise streams, as far as the Neuse.

Hybognathus procne Cope, Proc. Ac. Nat. Sci. Phila. 1864, 279, Delaware, Schuylkill, and Conestoga rivers, and White Clay Creek, Pennsylvania.

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~~4.17~~ = logische Skeptiker Idealisten.

Ist dies Hypothesis?

Hypothesis quaerens.

428. Notropis nigrotæniatus (Günther).
Atlisco, Mexico.
Graodus nigrotæniatus Günther, Cat., VII, 485, 1868, Atlisco, Mexico.

429. Notropis kanawha Jordan & Jenkins.
Tributaries of Kanawha River, southwestern Virginia.
Notropis kanawha Jordan & Jenkins, Proc. U. S. Nat. Mus. 1888, 354, pl. 44, fig. 5, Reed Creek, Wytheville, Virginia.

430. Notropis braytoni Jordan & Evermann. nitida
Tributaries of Rio San Juan at Cadereita in Nuevo Leon, Mexico.
Notropis braytoni Jordan & Evermann, Fishes North and Middle America, 264, 1896, Cadereita, Mexico; substitute for *Moniana nitida* Girard, preoccupied.

431. Notropis spectrunculus (Cope).
Headwaters of Tennessee River in Tennessee, Virginia, and North Carolina.
Hybopsis spectrunculus Cope, Jour. Ac. Nat. Sci. Phila. 1868, 231, Bear Creek, tributary of Middle Fork of Holston River, Virginia.

432. Notropis ozarcanus Meek.
White River, Arkansas, in the Ozark Mountains.
Notropis ozarcanus Meek, Bull. U. S. Fish. Com., IX, 1889 (1891), 129, North Fork of White River, Arkansas.

433. Notropis chihuahua Woolman.
Rio de los Conchos, Chihuahua, Mexico.
Notropis chihuahua Woolman, Am. Nat., March, 1892, 260, Rio de los Conchos, Chihuahua, Mexico.

Codoma
434. Notropis topeka Gilbert.
Western Iowa and eastern South Dakota to Kansas.
Notropis topeka Gilbert, Bull. Washburn Lab. Nat. Hist., I, 13, 1884, Shunganunga Creek, Topeka, Kansas.

Subgenus HUDSONIUS Girard.
Hudsonius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 210 (*hudsonius*).

435. Notropis gilberti Jordan & Meek.
Eastern Iowa to eastern Colorado.
Notropis gilberti Jordan & Meek, Proc. U. S. Nat. Mus. 1885, 4, Des Moines River and Village Creek, Ottumwa, Iowa.

436. Notropis piptolepis (Cope).
North Platte River.
Photogenis piptolepis Cope, Hayden's Geol. Surv. Wyo. for 1870 (1871), 438, Red Cloud Creek, a tributary of North Platte River, Nebraska.

437. Notropis simus (Cope).
Rio Grande at San Ildefonso, New Mexico.
Alburnellus simus Cope, Zool. Wheeler Surv., V, 649, 1875 (1876), San Ildefonso, New Mexico.

438. Notropis longirostris (Hay).
Chickasawha River, Mississippi, to Escambia River, Florida.
Alburnops longirostris Hay, Proc. U. S. Nat. Mus. 1880, 504, Chickasawha River at Enterprise, Mississippi.

439. Notropis nux Evermann.
Neches and Trinity rivers near Palestine, Texas.
Notropis nux Evermann, Bull. U. S. Fish Com., XI, 1891 (1892), 77, Neches River, Palestine, Texas.

440. Notropis nocomis Evermann.
Trinity, San Marcos, and Comal rivers, Texas.
Notropis nocomis Evermann, Bull. U. S. Fish Com., XI, 1891 (1892), 78, Trinity River, Palestine, Texas, and San Marcos River, San Marcos, Texas.

441. Notropis shumardi (Girard).

Ohio and Tennessee basins to Iowa and the Ozark region.

Alburnops shumardi Girard, Proc. Ac. Nat. Sci. Phila. 1856, 194, Arkansas River, Fort Smith, Arkansas.

442. Notropis illecebrosus (Girard).

Lower Arkansas River basin.

Alburnops illecebrosus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 194, Arkansas River, Fort Smith, Arkansas.

443. Notropis hudsonius (DeWitt Clinton). *Spawn-eater; Spot-tailed Minnow; Shiner.*

The Dakotas and Lake Superior to New York, and southward to South Carolina.

Clupea hudsonia DeWitt Clinton, Ann. Lyc. Nat. Hist. N. Y., I, 1824, 49, Hudson River, New York.

443a. Notropis hudsonius selene (Jordan).

Lake Superior and neighboring waters.

Luxilus selene Jordan, Bull. U. S. Nat. Mus., x, 60, 1877, Lake Superior, Bayfield, Wisconsin.

443b. Notropis hudsonius amarus (Girard).

Delaware, Susquehanna, and Potomac rivers.

Hudsonius amarus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 210, Chesapeake Bay and Potomac River at Washington.

443c. Notropis hudsonius saludanus (Jordan & Brayton).

Coastwise streams of Atlantic slope from James River to the Ocmulgee.

Alburnops saludanus Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 16, 1878, tributary of Saluda River, Greenville, South Carolina.

Subgenus CODOMA Girard.

Codoma Girard, Proc. Ac. Nat. Sci. Phila. 1856, 194 (*ornata*).

444. Notropis ornatus (Girard).

Chihuahua River, Mexico.

Codoma ornata Girard, Proc. Ac. Nat. Sci. Phila. 1856, 195, Chihuahua River, Mexico.

Subgenus MONIANA Girard.

Moniana Girard, Proc. Ac. Nat. Sci. Phila. 1856, 199 (*lutrensis*).

445. Notropis formosus (Girard).

Rio Mimbres, Chihuahua, Mexico.

Moniana formosa Girard, Proc. Ac. Nat. Sci. Phila. 1856, 201, Rio Mimbres, Chihuahua, Mexico.

446. Notropis frigidus (Girard).

Rio Frio, Texas.

Moniana frigida Girard, Proc. Ac. Nat. Sci. Phila. 1856, 210, Rio Frio, Texas.

447. Notropis lutrensis (Baird & Girard).

Southern Illinois to South Dakota, Kansas, and the Rio Grande.

Leuciscus lutrensis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 391, Otter Creek, tributary of the North Fork of Red River, Arkansas.

448. Notropis proserpina (Girard).

Rio Grande region.

Moniana proserpina Girard, Proc. Ac. Nat. Sci. Phila. 1856, 200, Devil River, Texas.

449. Notropis callisema (Jordan).

Ocmulgee River, Georgia.

Episema callisema Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 363, South Fork of Ocmulgee River, Flat Shoals, Georgia.

HUDSONIUS

CYPRINELLA

Notropis chorostis cockerell
Science XXIV, 1906, 879
Pueblo, Colo.

Subgenus CYPRINELLA Girard.
Cyprinella Girard, Proc. Ac. Nat. Sci. Phila. 1856, 196 (*bubalinus*).

450. Notropis bubalinus (Baird & Girard).
Streams of Arkansas and southwestward.
Leuciscus bubalinus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 391, Otter Creek, Arkansas.

451. Notropis ludibundus (Girard).
Locality unknown, probably Indian Territory.
Cyprinella ludibunda Girard, Proc. Ac. Nat. Sci. Phila. 1856, 199, locality unknown.

452. Notropis macrostomus (Girard).
Rio Grande region, northward to Kansas.
Cyprinella macrostoma Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Devil River, Texas.

453. Notropis texanus (Girard).
Rivers of Texas from Trinity River to the Salado.
Cyprinella texana Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Rio Salado and Turkey Creek, Texas.

454. Notropis notatus (Girard).
Streams of Texas from Austin westward.
Cyprinella notata Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Rio Seco, Texas.

455. Notropis venustus (Girard).
Streams of Texas.
Cyprinella venusta Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Rio Sabinal, Texas.

456. Notropis cercostigma (Cope).
Streams tributary to the Gulf of Mexico, from Pearl River and Red River to Rio Nueces.
Cyprinella cercostigma Cope, Proc. Ac. Nat. Sci. Phila. 1867, 157, Pearl River, Monticello, Mississippi.

457. Notropis stigmaturus (Jordan). *Spotted-tail Minnow.*
Alabama River basin.
Photogenis stigmaturus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 337, Etowah River, etc., Rome, Georgia.

458. Notropis trichroistius (Jordan & Gilbert).
Alabama River basin.
Codoma trichroistia Jordan & Gilbert, Bull. U. S. Nat. Mus., XII, 50, 1878, Etowah River, etc., Rome, Georgia.

459. Notropis callistius (Jordan).
Alabama River basin.
Photogenis callistius Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 337, Etowah River, etc., Rome, Georgia.

460. Notropis eurystomus (Jordan).
Chattahoochee River.
Photogenis eurystomus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 356, Nancy Creek, tributary of Chattahoochee River, near Atlanta, Georgia.

461. Notropis cæruleus (Jordan).
Alabama River basin.
Photogenis cæruleus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 338, Etowah River, Rome, Georgia.

462. Notropis niveus (Cope).
Southern Virginia to South Carolina.
Hybopsis niveus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 460, Catawba River, North Carolina.

462a. Notropis niveus chloristius (Jordan & Brayton).
Santee River and tributaries.
Codoma chloristia Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 21, 1878, tributary of Saluda River, Greenville, South Carolina.

463. Notropis whipplii (Girard). *Silver-fin; Satin-fin.*

Central and northern New York to Minnesota, northern Alabama, and Arkansas.

Cyprinella whipplii Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Sugar Loaf Creek, a tributary of Poteau River, Arkansas.

464. Notropis analostanus (Girard).

Streams about Delaware and Chesapeake bays.

Cyprinella analostana Girard, Proc. Ac. Nat. Sci. Phila. 1856, 198, Potomac River at Analostan Island, Washington, D. C.

465. Notropis galacturus (Cope).

Ozark region to Cumberland, Tennessee, and Savannah rivers.

Hypsilepis galacturus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 160, Holston River, Virginia.

466. Notropis camurus (Jordan & Meek).

Arkansas River and tributaries.

Cliola camura Jordan & Meek, Proc. U. S. Nat. Mus. 1884, 474, Arkansas River, Fort Lyon, Colorado.

467. Notropis xænurus (Jordan).

Altamaha River basin, Georgia.

Minnilus xænurus Jordan, Proc. Ac. Nat. Sci. Phila. 1877, 79, Ocmulgee River, Flat Shoals, Georgia.

468. Notropis hypselopterus (Günther).

Southern Georgia and Alabama.

Leuciscus hypselopterus Günther, Cat., VII, 255, 1868, Mobile, Alabama.

469. Notropis pyrrhomelas (Cope).

North and South Carolina in the Santee Basin.

Photogenis pyrrhomelas Cope, Proc. Amer. Phil. Soc. Phila. 1870, 463, Catawba River, North Carolina.

470. Notropis garmani Jordan.

Tributaries of Lago del Muerte, Coahuila, Mexico.

Notropis garmani Jordan, Cat. Fish. N. Am., 25, 1885, Lago del Muerte, Coahuila, Mexico.

Subgenus LUXILUS Rafinesque.

Luxilus Rafinesque, Ichth. Ohiensis, 47, 1820 (*chrysocephalus*).

471. Notropis cornutus (Mitchill). *Shiner; Red-fin; Dace.*

Entire region east of the Rocky Mountains except the South Atlantic States and Texas.

Cyprinus cornutus Mitchill, Amer. Month. Mag. Crit. Review, I, 1817, 289, Wallkill River, New York.

471a. Notropis cornutus frontalis (Agassiz).

Great Lakes; everywhere common in mouths of brooks.

Leuciscus frontalis Agassiz, Lake Superior, 368, 1850, Lake Superior.

471b. Notropis cornutus cyaneus (Cope).

Northern peninsula of Michigan.

Hypsilepis cornutus cyaneus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 160, Montreal River, Keweenaw, Michigan.

472. Notropis cerasinus (Cope).

Roanoke River basin, in mountain brooks.

Hypsilepis cornutus cerasinus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 159, headwaters of Roanoke River, Virginia.

Coccogenia Cockerell & Callaway
Proc Biol Soc Wash 1902, 1
Coccotis Jordan. Rept. Zool on cocoogenis.
IV, 1882. p 852, Same type

473. Notropis albeolus (Jordan).

Roanoke, Tar, and Neuse rivers.

Notropis megalops albeolus Jordan, Bull. U. S. Fish Com. 1888 (1891), 123, Roanoke River near Roanoke, Virginia.

474. Notropis lacertosus (Cope).

Headwaters of Tennessee River.

Hybopsis lacertosus Cope, Jour. Ac. Nat. Sci. Phila. 1868, 232, Bear Creek, tributary of the Middle Fork of Holston River.

Subgenus HYDROPHLOX Jordan.

Hydrophlox Jordan, Bull. U. S. Nat. Mus., XII, 18, 1878 (*rubricroceus*).

475. Notropis macdonaldi Jordan & Jenkins.

Mountain streams of Virginia tributary to James and Shenandoah rivers.

Notropis macdonaldi Jordan & Jenkins, Proc. U. S. Nat. Mus. 1888, 354, Shenandoah River, Luray, Virginia.

476. Notropis coccogenis (Cope). Cocco'is

Cumberland, Tennessee, and Savannah rivers.

Hypsilepis coccogenis Cope, Proc. Ac. Nat. Sci. Phila. 1867, 160, Holston River, Virginia.

477. Notropis zonatus (Agassiz).

Mountain streams in the Ozark region of Missouri and Arkansas.

Alburnus zonatus Agassiz, in Putnam, Bull. Mus. Comp. Zool., 1, 9, 1863, Osage River, Missouri.

478. Notropis zonistius (Jordan).

Chattahoochee River.

Luxilus zonistius Jordan, Proc. U. S. Nat. Mus. 1879, 239, Suwanee Creek, tributary of Chattahoochee River, in northern Georgia.

479. Notropis rubricroceus (Cope). *Red Fallfish.* HYDROPHLOX

Headwaters of the Tennessee and Savannah rivers.

Hybopsis rubricroceus Cope, Jour. Ac. Nat. Sci. Phila. 1868, 231, Tumbling Creek, tributary of the North Fork of Holston River, Virginia.

480. Notropis chlorocephalus (Cope).

Santee Basin, in North and South Carolina.

Hybopsis chlorocephalus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 461, Catawba River, North Carolina.

481. Notropis lutipinnis (Jordan & Brayton).

Santee and Oconee rivers, Georgia.

Hydrophlox lutipinnis Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 36, 1878, Oconee River, Halls Springs, Georgia.

482. Notropis chiliticus (Cope).

Basin of Great Pedee River, North Carolina; common in upland streams.

Hybopsis chiliticus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 462, Yadkin River, Rowan County, North Carolina.

483. Notropis altipinnis (Cope).

Yadkin, Great Pedee, and Cape Fear rivers, North Carolina.

Alburnellus altipinnis Cope, Proc. Amer. Phil. Soc. Phila. 1870, 464, Yadkin River, Rowan County, North Carolina.

484. Notropis roseus (Jordan).

Lowland streams of Gulf States from Ogeechee River to the Mississippi.

Luxilus roseus Jordan, Bull. U. S. Nat. Mus., X, 61, 1877, Notalbany River near Tickfaw, Louisiana.

485. Notropis chalybæus (Cope).

Delaware River to Ogeechee River.

Hybopsis chalybæus Cope, Cypr. Penn., 383, 1866, Schuylkill River, Pennsylvania.

486. Notropis chrosomus (Jordan).

Alabama Basin; very abundant in clear streams and outlets of springs.
Hybopsis chrosomus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 333, Etowah River, etc., Rome, Georgia.

487. Notropis xænocephalus (Jordan).

Georgia to Mississippi; common in streams of the pine woods, descending to brackish water; abundant in Perdido Bay.
Hybopsis xænocephalus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 334, Etowah River, etc., Rome, Georgia.

Subgenus ORCELLA Jordan & Evermann.

Orcella Jordan & Evermann, Fishes North and Middle America, 289. 1896 (*orca*).

488. Notropis orca Woolman.

Rio Grande at El Paso, Texas.
Notropis orca Woolman, Bull. U. S. Fish. Com., XIV, 1894, 56, Rio Grande, El Paso, Texas.

Subgenus NOTROPIS Rafinesque.

489. Notropis ariommus (Cope).

Ohio and Tennessee valleys.
Photogenis ariommus Cope, Cypr. Penn., 378, 1866, White River near Indianapolis.

490. Notropis scabriceps (Cope).

Kanawha River, West Virginia.
Photogenis scabriceps Cope, Proc. Ac. Nat. Sci. Phila. 1867, 166, Sinking and Walker creeks, tributaries of Kanawha River.

491. Notropis jejunus (Forbes).

Western Pennsylvania to Kansas, and north to Winnipeg.
Episema jejuna Forbes, Bull. Ill. Lab. Nat. Hist., I, 60, 1878, Illinois River.

492. Notropis swaini Jordan.

Rivers of Texas from the Colorado westward.
Notropis swaini Jordan, Proc. U. S. Nat. Mus. 1885, 123, Rio Comal, New Braunfels, Texas.

493. Notropis amabilis (Girard).

Rio Leona, a tributary of Rio Nueces, Texas.
Alburnus amabilis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 193, Rio Leona, Texas.

494. Notropis leuciodus (Cope).

Tennessee River basin, in mountain streams.
Photogenis leuciodus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 165, Holston River, Virginia.

495. Notropis telescopus (Cope).

Tennessee River basin; very abundant in cold mountain streams.
Photogenis telescopus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 165, Holston River, Virginia.

495a. Notropis telescopus arcansanus Meek.

White River and Little Red River, Arkansas.
Notropis telescopus arcansanus Meek, Bull. U. S. Fish Com., IX, 1889 (1891), 133. White River, Eureka Springs, Arkansas; Mammoth Spring, Arkansas.

496. Notropis socius (Girard).

Live Oak Creek, southwestern Texas.
Alburnus socius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 193, Live Oak Creek, Texas.

497. Notropis notemigonoides Evermann.

Rio Neches near Palestine, Texas, and streams about Houston, Texas.
Notropis notemigonoides Evermann, Bull. U. S. Fish Com., XI, 1891 (1892), 81, Neches River, Palestine, Texas, and Sims Bayou, Houston, Texas.

Orcella prosec?, by Orcadella. & Orcella

Episema & Paranotropis Jones

"Entropis measure. Surprise.
in San Bernardino. Yes in Bacon
Lecture 4-5.
is a Independence."

498. Notropis stilbius Jordan.

Alabama River and tributaries.

Notropis stilbius Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 343, Etowah and Oostanaula rivers, Rome, Georgia.

499. Notropis atherinoides Rafinesque.

Great Lakes region, Ohio and Mississippi valleys, and north to Winnipeg.

Notropis atherinoides Rafinesque, Amer. Month. Mag. and Crit. Rev. 1818, 204, Lake Erie.

500. Notropis arge (Cope).

Upper Mississippi Valley.

Alburnellus arge Cope, Cypr. Penn., 388, 1866, Detroit River or St. Joseph River, Michigan.

501. Notropis dilectus (Girard).

Lower Ohio to the Rio Grande.

Alburnus dilectus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 193, Arkansas River, Fort Smith, Arkansas.

502. Notropis fumeus Evermann.

Hunter Creek, Houston, Texas.

Notropis fumeus Evermann, Bull. U. S. Fish Com., XI, 1891 (1892), 81, Hunter Creek, Houston, Texas.

503. Notropis rubrifrons (Cope).

New York and western Pennsylvania to southern Michigan, Kansas, and Kentucky.

Alburnellus rubrifrons Cope, Proc. Ac. Nat. Sci. Phila. 1865, 85, Kiskiminitas River, a tributary of Alleghany River, Pennsylvania.

504. Notropis photogenis (Cope).

Alleghany region.

Squalius photogenis Cope, Proc. Ac. Nat. Sci. Phila. 1864, 280, Youghiogheny River, Pennsylvania.

505. Notropis amœnus (Abbott).

Clear streams east of the Alleghanies from the Raritan to the Neuse.

Alburnellus amœnus Abbott, Am. Nat., VIII, 1874, 334, Raritan River, New Jersey.

506. Notropis scepticus (Jordan & Gilbert).

Rivers of Carolina from the Cape Fear to the Santee.

Minnilus scepticus Jordan & Gilbert, Synopsis, 200, 1883, Saluda River, Greenville, South Carolina.

507. Notropis micropteryx (Cope).

Headwaters of Cumberland and Tennessee rivers; also in Ozark region.

Alburnellus micropteryx Cope, Jour. Ac. Nat. Sci. Phila. 1868, 233, Holston River, Virginia.

508. Notropis metallicus Jordan & Meek.

Swamp streams in Georgia and Florida, from the Suwanee Basin to the Escambia.

Notropis metallicus Jordan & Meek, Proc. U. S. Nat. Mus. 1884, 475, Allapaha River, Nashville, Georgia.

Subgenus LYTHRURUS Jordan.

Lythrurus Jordan, Man. Vert. E. U. S., ed. 1, 272, 1876 (*diplemius* = *lythrurus*).

509. Notropis bellus (Hay).

Tombigbee River, Mississippi.

Minnilus bellus Hay, Proc. U. S. Nat. Mus. 1880, 510, Tombigbee River, Artesia and Macon, Mississippi.

510. Notropis lirus (Jordan).

Alabama River basin.

Nototropis lirus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 342, Etowah River and other small streams about Rome, Georgia.

511. Notropis roseipinnis Hay.

Sandy streams of Gulf States, from Escambia River to the Chickasawha.

Notropis roseipinnis Hay, in Jordan, Cat. Fish. N. A., 27, 1885, Chickasawha River, Enterprise, Miss.; substitute for *rubripinnis*, preoccupied.

512. Notropis umbratilis (Girard).

Arkansas River and streams of Kansas and southwestern Iowa.

Alburnus umbratilis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 193, Sugar Loaf Creek, tributary of Poteau River, Arkansas.

512a. Notropis umbratilis atripes (Jordan).

Southern Illinois and Iowa.

Lythrurus atripes Jordan, Bull. Ill. Lab. Nat. Hist., vol. I, 59, 1878, streams of Union and Johnson counties, Illinois.

512b. Notropis umbratilis lythrurus (Jordan).

Ohio Valley and rivers of neighboring States.

Notropis lythrurus Jordan, Proc. U. S. Nat. Mus. 1884, 476, White River, Indianapolis, Indiana.

512c. Notropis umbratilis cyanocephalus (Copeland).

Rivers of southern Wisconsin and northern Illinois and Indiana.

Lythrurus cyanocephalus Copeland, Proc. Ac. Nat. Sci. Phila. 1877, 70, Racine River, Wisconsin.

512d. Notropis umbratilis ardens (Cope).

Roanoke River, Virginia.

Hypsilepis ardens Cope, Proc. Ac. Nat. Sci. Phila. 1867, 163, headwaters of Roanoke River, Montgomery County, Virginia.

512e. Notropis umbratilis fasciolaris Gilbert.

Southern bend of Tennessee River, in limestone streams.

Notropis umbratilis fasciolaris Gilbert, Bull. U. S. Fish Com., IX, 1889 (1891), 148, streams about Florence, Alabama.

512f. Notropis umbratilis matutinus (Cope).

Neuse and Pamlico rivers; common in sandy brooks.

Alburnellus matutinus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 465, Neuse River, Wake County, North Carolina.

512g. Notropis umbratilis punctulatus (Hay).

Tributaries of Big Hatchee River, northern Mississippi.

Minnilus punctulatus Hay, Proc. U. S. Nat. Mus. 1880, 508, Tuscumbia River, a tributary of the Big Hatchee, near Corinth, Mississippi.

Genus 125. ERICYMBA Cope.

Ericymba Cope, Proc. Ac. Nat. Sci. Phila. 1865, 88 (*buccata*).

513. Ericymba buccata Cope.

Michigan and western Pennsylvania to Kansas, and southward to western Florida.

Ericymba buccata Cope, Proc. Ac. Nat. Sci. Phila. 1865, 88, Kiskiminitas River, a tributary of the Monongahela, western Pennsylvania.

Genus 126. PHENACOBIUS Cope.

Phenacobius Cope, Proc. Ac. Nat. Sci. Phila. 1867, 96 (*teretulus*).

514. Phenacobius teretulus Cope.

Kanawha River, West Virginia.

Phenacobius teretulus Cope, Proc. Ac. Nat. Sci. Phila. 1867, 96, Kanawha River, Eggleston Springs, West Virginia.

515. Phenacobius mirabilis (Girard).

Illinois River to Arkansas.

Exoglossum mirabile Girard, Proc. Ac. Nat. Sci. Phila. 1856, 191, Arkansas River, Fort Smith, Arkansas.

?

516. Phenacobius scopifer (Cope).
Illinois and Nebraska to the Rio Grande.
Sarcidium scopiferum Cope, Hayden's Geol. Surv. Wyo. for 1870 (1871), 440, Missouri River near St. Joseph, Missouri.

517. Phenacobius uranops Cope.
Upper Tennessee Basin.
Phenacobius uranops Cope, Proc. Ac. Nat. Sci. Phila. 1867, 96, Holston River, Saltville, Virginia.

518. Phenacobius catostomus Jordan.
Alabama River basin.
Phenacobius catostomus Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 332, Etowah and Oostanaula rivers, Rome, Georgia.

Genus 127. EVARRA Woolman.
Evarra Woolman, Bull. U. S. Fish. Com., XIV, 1894, 64 (*eigenmanni*).

519. Evarra eigenmanni Woolman.
City of Mexico.
Evarra eigenmanni Woolman, Bull. U. S. Fish Com., XIV, 1894, 64, City of Mexico.

Genus 128. TIAROGA Girard.
Tiaroga Girard, Proc. Ac. Nat. Sci. Phila. 1856, 204 (*cobitis*).

520. Tiaroga cobitis Girard.
Rio San Pedro, a tributary of Rio Gila.
Tiaroga cobitis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 204, Rio San Pedro, Arizona.

Genus 129. RHINICHTHYS Agassiz.
Rhinichthys Agassiz, Lake Superior, 353, 1850 (*atronasus*).

521. Rhinichthys cataractæ (Cuvier & Valenciennes). *Long-nosed Dace.*
New England to Virginia and Wisconsin, its varieties ranging to the Pacific Coast.
Gobio cataractæ Cuvier & Valenciennes, Hist. Nat. Poiss., XVI, 315, 1842, Niagara Falls.

521a. Rhinichthys cataractæ dulcis (Girard).
Upper Missouri, Platte, Arkansas, Rio Grande, and Colorado rivers; the Columbia River; the Utah Basin, and coastwise streams of Washington and Oregon.
Argyreus dulcis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 185, Sweetwater River, Wyoming.

522. Rhinichthys simus Garman.
Coahuila, Mexico.
Rhinichthys simus Garman, Science Observer, 61, 1881, Coahuila, Mexico.

523. Rhinichthys atronasus (Mitchill). *Black-nosed Dace.*
New England to Minnesota, northern Alabama, and Virginia.
Cyprinus atronasus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 460, 1815, Wallkill River; brooks of New York.

523a. Rhinichthys atronasus croceus (Storer).
Tennessee Basin; abundant in clear brooks.
Leuciscus croceus Storer, Proc. Bost. Soc. Nat. Hist., II, 1845, 48, Alabama, probably Florence.

523b. Rhinichthys atronasus lunatus (Cope).
Lakes and brooks of Michigan, Indiana, Wisconsin, Minnesota, and in Rainy River.
Rhinichthys lunatus Cope, Proc. Ac. Nat. Sci. Phila. 1864, 278, Grosse Isle, Michigan.

523c. Rhinichthys atronasus meleagris (Agassiz).

Illinois and Iowa.

Rhinichthys meleagris Agassiz, Am. Jour. Sci. Arts 1854, 357, Burlington, Iowa.

Genus 130. AGOSIA Girard.

Agosia Girard, Proc. Ac. Nat. Sci. Phila. 1856, 186 (*chrysogaster*).

Subgenus APOCOPE Cope.

Apocope Cope, Hayden's Geol. Surv. Mont. for 1871 (1872), 472 (*carringtoni*).

524. Agosia oscula (Girard).

Lower Colorado and Gila rivers.

Argyreus osculus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 186, Babocomori Creek, a tributary of the Rio San Pedro, Arizona.

525. Agosia yarrowi Jordan & Evermann.

Streams of Colorado in the Colorado River basin.

Agosia yarrowi Jordan & Evermann, Bull. U. S. Fish Com., IX, 1889 (1891), 28, Tomichi Creek and Gunnison River, Gunnison, Colorado.

526. Agosia couesii (Yarrow).

Colorado River basin.

Apocope couesii Yarrow, Field and Forest, 1876, and Zool. Wheeler Surv., 648, 1875 (1876), Camp Apache, Arizona.

527. Agosia adobe Jordan & Evermann.

Sevier River, Utah.

Agosia adobe Jordan & Evermann, Bull. U. S. Fish. Com., IX, 1889 (1891) 36, Sevier River, Juab, Utah.

528. Agosia nevadensis (Gilbert).

Warm Springs in the deserts of southwestern Nevada; Ash Meadows, Indian Creek, and Vegas Creek, Nevada.

Rhinichthys (*Apocope*) *nevadensis* Gilbert, Death Valley Expedition, 230, pl. 6, fig. 1, 1893, Ash Meadows, Amargosa Desert, Nevada.

529. Agosia nubila (Girard).

Basin of the Columbia River from western Idaho, below Shoshone Falls of Snake River to the coast, and in coastwise streams from Washington southward into Oregon.

Argyreus nubilus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 180, Fort Steilacoom, Puget Sound.

529a. Agosia nubila carringtonii (Cope).

Upper Snake River basin to Heart Lake in Yellowstone Park; thence extending southward in the Great Basin and the Coast Ranges.

Apocope carringtonii Cope, Hayden's Fifth Annual Report U. S. Geological Survey for 1871 (1872), 472, Warm Springs, Box Elder County, Utah.

530. Agosia velifera (Gilbert).

Pahranagat Valley, southwestern Nevada.

Rhinichthys (*Apocope*) *velifer* Gilbert, Death Valley Expedition, 229, pl. 6, fig. 2, 1893, Pahranagat Valley, Nevada.

531. Agosia umatilla Gilbert & Evermann.

Columbia River at Umatilla, Oregon, and the Payette and Salmon rivers, Idaho.

Agosia umatilla Gilbert & Evermann, Investigations in the Columbia River Basin, 42, pl. 9, fig. 2, 1894, Columbia River, Umatilla, Oregon.

532. Agosia falcata Eigenmann & Eigenmann.

Columbia River basin; Boise River at Caldwell, Idaho; Payette River at Payette, Idaho; Columbia River at Pasco and Umatilla, and Mill Creek at Walla Walla.

Agosia falcata Eigenmann & Eigenmann, Am. Nat., XXVII, February 4, 1893, 153, Boise River at Caldwell, Idaho.

Myotopsis [illegible] Gilbert & Snyder.
Umpqua R. Ore.

Subgenus AGOSIA Girard.

533. Agosia chrysogaster Girard. Sonoyla R.
Tributaries of the Gila River.
Agosia chrysogaster Girard, Proc. Ac. Nat. Sci. Phila. 1856, 187, Rio Santa Cruz, Sonora, Mexico.

Genus 131. HYBOPSIS Agassiz. ?
Hybopsis Agassiz, Am. Jour. Sci. Arts 1854, 358 (*gracilis* = *amblops*).

Subgenus ERIMYSTAX Jordan.
Erimystax Jordan, Geol. Surv. Ohio, IV, Zool., 858, 1882 (*dissimilis*).

534. Hybopsis tetranema Gilbert. Ep bracicus
Tributaries of Arkansas River in Kansas and Arkansas.
Hybopsis tetranemus Gilbert, Bull. Washburn College Lab., vol. 1, No. 7, 208, 1886, Elm and Spring creeks, Medicine Lodge, Kansas.

535. Hybopsis æstivalis (Girard). Macrhybopsis
Arkansas River to the Rio Grande.
Gobio æstivalis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 189, Rio San Juan, Monterey, New Leon, Mexico.

535a. Hybopsis æstivalis marconis Jordan & Gilbert.
Abundant in Rio San Marcos, San Marcos, Texas; also known from the Guadalupe River near San Marcos and the Rio Comal at New Braunfels, Texas.
Hybopsis æstivalis marconis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 22, Rio San Marcos, San Marcos, Texas.

536. Hybopsis hyostoma (Gilbert).
Indiana to Iowa, and south to the Alabama River.
Nocomis hyostomus Gilbert, Proc. U. S. Nat. Mus. 1884, 203, White River, Bedford, Indiana.

537. Hybopsis gelida (Girard).
Middle Missouri River basin from Wyoming to eastern Nebraska.
Gobio gelidus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 188, Milk River, Montana.

538. Hybopsis meeki Jordan & Evermann.
Missouri River at St. Joseph and elsewhere, in the river channel.
Hybopsis meeki Jordan & Evermann, Fishes North and Middle America, 317, 1896, Missouri River at St. Joseph, Missouri.

539. Hybopsis montana Meek.
Types supposed to be from the upper Missouri.
Hybopsis montanus Meek, Proc. U. S. Nat. Mus. 1884, 526, locality unknown, but collected by Dr. F. V. Hayden.
?

540. Hybopsis cumingii (Günther).
California; only the type known.
Ceratichthys cumingii Günther, Cat., VII, 177, 1868, California.

541. Hybopsis monaca (Cope). Erimonax
Tennessee Basin, in the river channels.
Ceratichthys monacus Cope, Jour. Ac. Nat. Sci. Phila. 1867, 227, Holston River, Washington County, Virginia.

542. Hybopsis dissimilis (Kirtland). *Spotted Shiner.*
Lake Erie to the headwaters of the Tennessee and west to Arkansas and Iowa.
Luxilus dissimilis Kirtland, Bost. Jour. Nat. Hist., III, 1840, 341, pl. 4, fig. 2, *Mahoning River, Ohio,* and Lake Erie near Cleveland, Ohio.

543. Hybopsis watauga Jordan & Evermann.

Holston River, Virginia; Watauga River, Tennessee; White River, Arkansas; Big Barren River, Kentucky, and Tippecanoe River, Indiana.

Hybopsis watauga Jordan & Evermann, Proc. U. S. Nat. Mus. 1888, 555, Watauga River, Elizabethtown, Tennessee; North Fork of Holston River, Saltville, Virginia.

Subgenus HYBOPSIS Agassiz.

544. Hybopsis labrosa (Cope).

Basin of the Santee in North and South Carolina.

Ceratichthys labrosus Cope, Proc. Amer. Phil. Soc. 1870, 458, tributaries of Catawba River, McDowell and Burke counties, North Carolina.

545. Hybopsis hypsinota (Cope).

Santee Basin, in North and South Carolina.

Ceratichthys hypsinotus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 458, tributaries of Catawba River, McDowell County, North Carolina.

546. Hybopsis rubrifrons (Jordan).

Basin of the Altamaha, Georgia.

Nocomis rubrifrons Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 330, Ocmulgee River, Flat Shoals, Georgia.

547. Hybopsis amblops (Rafinesque). *Silver Chub.*

New York to Iowa, and southward to Alabama; very common in the Ohio and Tennessee valleys.

Rutilus amblops Rafinesque, Ichth. Ohiensis, 51, 1820, Ohio River at the Falls.

548. Hybopsis storeriana (Kirtland).

Lake Erie to Nebraska and eastern Wyoming, Tennessee, and Arkansas; abundant in the larger streams, especially in Iowa and Nebraska.

Rutilus storerianus Kirtland, Proc. Bost. Soc. Nat. Hist., I, 1842, 71, Lake Erie.

Subgenus YURIRIA Jordan & Evermann.

Yuriria Jordan & Evermann, Fishes North and Middle America, 321, 1896 (*altus*).

549. Hybopsis alta (Jordan). *Pesca Blanca.*

Lakes and streams of Guanajuato, tributary to Rio Lerma, Mexico, in Pacific drainage.

Hudsonius altus Jordan, Proc. U. S. Nat. Mus. 1879, 301, Lake Tupataro, Guanajuato, Mexico.

Subgenus NOCOMIS Girard.

Nocomis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 190 (*nebrascensis* = *kentuckiensis*).

550. Hybopsis kentuckiensis (Rafinesque). *Horny Head; River Chub; Jerker; Indian Chub.*

Pennsylvania to Wyoming and Alabama, on both sides of the Alleghanies; everywhere abundant in the larger streams, seldom ascending small brooks.

Luxilus kentuckiensis Rafinesque, Ichth. Ohiensis, 48, 1820, Ohio River.

Genus 132. COUESIUS Jordan.

Couesius Jordan, Bull. Hayden's Geol. Surv. Terr., IV, 785, 1878 (*milneri*).

551. Couesius squamilentus (Cope).

Henry Fork of Green River in southwestern Wyoming.

Ceratichthys squamilentus Cope, Hayden's Geol. Surv. Wyo. for 1870 (1872), 442, Henry Fork of Green River, Wyoming, Colorado Basin.

552. Couesius plumbeus (Agassiz).

Streams and lakes, from Lake Superior east to the Adirondack region and New Brunswick.

Gobio plumbeus Agassiz, Lake Superior, 366, 1856, Lake Superior.

557 is Coregonus anguliceps
Nal.

553. Couesius dissimilis (Girard).

Upper Missouri and Black Hills region.

Leucosomus dissimilis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 189, Milk River and Little Muddy River, Montana.

554. Couesius greeni Jordan.

Stuart Lake, headwaters of Fraser River in British Columbia, and Lake Pend Oreille, Idaho.

Couesius greeni Jordan, Proc. U. S. Nat. Mus. 1893, 313, Stuart Lake, British Columbia.

555. Couesius adustus Woolman.

Rio de loc Conchos, Chihuahua, Mexico.

Couesius adustus Woolman, Bull. U. S. Fish Com., XIV, 1894, 57, Rio de los Conchos, Chihuahua, Mexico.

Genus 133. PLATYGOBIO Gill.

Platygobio Gill, Trans. Amer. Phil. Soc. Phila., V, 1863, 178 (*communis* = *gracilis*).

556. Platygobio physignathus (Cope).

Upper waters of Arkansas River; very abundant in the channels, the most common fish at Pueblo, Colorado.

Ceratichthys physignathus Cope, Wheeler Surv., Zool., V, 651, 1875 (1876), Arkansas River, Pueblo, Colorado.

557. Platygobio gracilis (Richardson). *Flat-headed Chub.*

East slope of the Rocky Mountains, from Missouri and Yellowstone rivers to the Saskatchewan.

Cyprinus (*Leuciscus*) *gracilis* Richardson, Fauna Bor.-Amer., Fishes, 120, pl. 78, 1836, Saskatchewan River at Carlton-house, Canada.

558. Platygobio pallidus Forbes.

One specimen from Ohio River at Cairo.

Platygobio pallidus Forbes, in Jordan & Gilbert, Synopsis, 220, 1883, Ohio River at Cairo, Illinois.

Genus 134. EXOGLOSSUM Rafinesque.

Exoglossum Rafinesque, Jour. Ac. Nat. Sci. Phila., I, 1818, 420 (*lesueurianum*).

559. Exoglossum maxillingua (LeSueur). *Cut-lips; Nigger Chub; Nigger Dick.*

Lake Ontario, St. Lawrence River, Lake Champlain, Hudson River, and Cayuga Lake, and southward to Virginia; abundant in the basins of the Susquehanna, Hudson, Potomac, James, Roanoke, and Kanawha.

Cyprinus maxillingua LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 85, Pipe Creek, Maryland.

Genus 135. LEPIDOMEDA Cope.

Lepidomeda Cope, Proc. Amer. Phil. Soc. Phila. 1874, 131 (*vittata*).

560. Lepidomeda vittata Cope.

Known only from the Colorado Chiquito River, Arizona, and from Pahranagat Valley, Nevada.

Lepidomeda vittata Cope, Proc. Amer. Phil. Soc. Phila. 1874, 131, Rio Colorado Chiquito, Arizona.

561. Lepidomeda jarrovii Cope.

Colorado Chiquito River, Arizona; also in southern Nevada, in springs in the desert.

Lepidomeda jarrovii Cope, Proc. Amer. Phil. Soc. Phila. 1874, 132, Rio Colorado Chiquito, Arizona.

Genus 136. MEDA Girard.

Meda Girard, Proc. Ac. Nat. Sci. Phila. 1856, 191 (*fulgida*).

562. Meda fulgida Girard.

Rio Gila, Arizona.

Meda fulgida Girard, Proc. Ac. Nat. Sci. Phila. 1856, 191, Rio San Pedro, Arizona.

Genus 137. PLAGOPTERUS Cope.

Plagopterus Cope, Proc. Amer. Phil. Soc. Phila. 1874, 130 (*argentissimus*).

563. Plagopterus argentissimus Cope.

Colorado Basin in western Colorado (Cope); Fort Yuma (Gilbert).

Plagopterus argentissimus Cope, Proc. Amer. Phil. Soc. Phila. 1874, 130, San Luis Valley, Colorado.

Suborder HETEROGNATHI.

Family XXXVIII. ERYTHRINIDÆ.

Genus 138. MACRODON Müller.

Macrodon Müller, Archiv Anat., 1842, 308 (*trahira = malabaricus*).

564. Macrodon microlepis Günther.

Panama to Ecuador, chiefly west of the Andes; known from Rio Chagres and from Ecuador.

Macrodon microlepis Günther, Cat., v, 282, 1864, western Ecuador; Chagres River, Guatemala.

Family XXXIX. CHARACINIDÆ. The Characins.

Genus 139. CURIMATA (Cuvier) Cloquet.

Curimata Cuvier, in Cloquet, Dict. Hist. Nat., XII, 240, 1818 (*edentula*).

565. Curimata magdalenæ Steindachner. *Sardina Blanca.*

Rio Magdalena and Rio Mamoni, Colombia.

Curimatus magdalenæ Steindachner, Fisch-Fauna des Magdalenen-Stromes, 34, 1878, Rio Magdalena, Colombia.

Genus 140. PIABUCINA Cuvier & Valenciennes.

Piabucina Cuvier & Valenciennes, Hist. Nat. Poiss., XXII, 161, 1849 (*erythrinoides*).

566. Piabucina panamensis Gill.

Rio Frijoli, Atlantic Slope of Isthmus of Panama.

Piabucina panamensis Gill, Proc. Ac. Nat. Sci. Phila. 1876, 336, Rio Frijoli, Isthmus of Panama.

Genus 141. TETRAGONOPTERUS Cuvier.

Tetragonopterus (Artedi) Cuvier, Règne An., II, 166, 1817 (*argenteus*).

Subgenus ASTYANAX Baird & Girard.

Astyanax Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1854, 26 (*argentatus*).

567. Tetragonopterus æneus Günther.

Oaxaca, Mexico, and Rio Chagres, south to Brazil.

Tetragonopterus æneus Günther, Proc. Zool. Soc. Lond. 1860, 319, Oaxaca, Mexico.

568. Tetragonopterus rutilus Jenyns.

Mexico to Ecuador and Rio de la Plata; recorded as common in Central America.

Tetragonopterus rutilus Jenyns, Zool. Beagle, Fishes, 125, 1842, Rio Parana, South America.

569. Tetragonopterus panamensis Günther.

Streams about Panama and Lake Yzabal.

Tetragonopterus panamensis Günther, Cat., v, 324, 1864, Panama; Lake Yzabal.

570. Tetragonopterus microphthalmus Günther.

Guatemala (Lake Amatitlan) to Peru.

Tetragonopterus microphthalmus Günther, Cat., v, 324, 1864, Lake Amatitlan; Rio Rimao, Peru.

Bycon guatemalensis Regan

Ictl. macrophthalmus. } 8 Mex.
T. angustifrons

several new gar pike species.

Anorhynchichthys for
Anorhynchus proc.

Cichlasoma laurae

571. Tetragonopterus ærstedii Kroyer.
Rio San Juan, Nicaragua.
Tetragonopterus ærstedii Kroyer, in Lütken, Ict. Bidrag, III, 229, 1874, Rio San Juan, Nicaragua.

572. Tetragonopterus petenensis Günther.
Lake Peten to western Ecuador; southeast to Argentine Republic.
Tetragonopterus petenensis Günther, Cat., V, 326, 1864, Lake Peten.

573. Tetragonopterus scabripinnis Jenyns.
Jamapa, Mexico, to Rio Janeiro.
Tetragonopterus scabripinnis Jenyns, Zool. Beagle, Fishes, 125, 1842, Rio Janeiro, Brazil.

574. Tetragonopterus humilis Günther.
Lake Amatitlan, Guatemala.
Tetragonopterus humilis Günther, Cat., V, 327, 1864, Lake Amatitlan, Guatemala.

575. Tetragonopterus brevimanus Günther.
Guatemala.
Tetragonopterus brevimanus Günther, Cat., V, 325, 1864, Yzabal; Rio San Geronimo, Guatemala.

576. Tetragonopterus mexicanus Filippi.
Lakes about the City of Mexico.
Tetragonopterus mexicanus Filippi, in Guerin's Rev. Mag. Zool., 166, 1853, City of Mexico.

577. Tetragonopterus argentatus (Baird & Girard).
Southern Texas and Mexico (Rio Nueces, Rio Leona, and Rio Grande); also recorded, probably by error, from Arkansas.
Astyanax argentatus Baird & Girard, Proc. Ac. Nat. Sci. Phila., VII, 1854, 27, Rio Nueces, Rio Leona, Zoquito, Comanche Spring, Elm Creek, Turkey Creek, San Felipe, Devil River, Brownsville, and Rio Sabinal.

Genus 142. BRYCON Müller & Troschel.
Brycon Müller & Troschel, Horæ Ichthyologiæ, I, 15, 1845 (*falcatus*).

Subgenus CHALCINOPSIS Kner.
Chalcinopsis Kner, Sitzber. Akad. Wiss. München, 226, 1863 (*striatulus*).

578. Brycon dentex Günther.
Yucatan to Ecuador.
Brycon dentex Günther, Proc. Zool. Soc. Lond. 1860, 240, Esmeraldas, Ecuador.

579. Brycon striatulus (Kner).
Rio Chagres and streams about Panama.
Chalcinopsis striatulus Kner, Sitzber. Akad. Wiss. München, 223, 1863, Panama.

Genus 143. GASTEROPELECUS (Gronow) Pallas.
Gasteropelecus Gronow, Mus. Ichthyol., II, 7, 1763 (nonbinomial).

580. Gasteropelecus maculatus Steindachner. *Peche Peche.*
Rio Mamoni, near Panama.
Gasteropelecus maculatus Steindachner, Fluss-Fische Südamerikas, 168, 1879, Rio Mamoni, at Chepo, Panama.

Genus 144. RŒBOIDES Günther.
Rœboides Günther, Cat., V, 347, 1864 (*microlepis*).

581. Rœboides guatemalensis (Günther).
Rio Chagres and streams of Guatemala.
Anacyrtus guatemalensis Günther, Cat., V, 347, 1864, Rio Chagres; Huamuchal.

Genus 145. **BRAMOCHARAX** Gill.

Bramocharax Gill, Proc. Ac. Nat. Sci. Phila. 1877, 189 (*bransfordi*).

582. Bramocharax bransfordi Gill.

Lake Nicaragua.

Bramocharax bransfordi Gill, Proc. Ac. Nat. Sci. Phila. 1877, 190, Lake Nicaragua.

Genus 146. **LUCIOCHARAX** Steindachner.

Luciocharax Steindachner, Fisch-Fauna des Magdalenen-Stromes, 67, 1878 (*insculptus*).

583. Luciocharax insculptus Steindachner.

Rio Magdalena, and Rio Mamoni near Panama.

Luciocharax insculptus Steindachner, Fisch-Fauna des Magdalenen-Stromes, 67, 1878, Rio Magdalena, and Rio Mamoni near Panama.

Suborder GYMNONOTI.

Family XL. GYMNOTIDÆ.

Genus 147. **GITON** Kaup.

Giton Kaup, in Duméril, Analyt. Ichth., 201, 1856 (*fasciatus*).

584. Giton fasciatus (Pallas). *Carapo.*

Guatemala to Rio de la Plata; recorded from Rio Matagua and Grenada.

Gymnotus fasciatus Pallas, Spicilegia Zool., VII, 35, 1769, "fresh waters of America."

Genus 148. **EIGENMANNIA** Jordan & Evermann.

Eigenmannia Jordan & Evermann, Fishes North and Middle America, 341, 1896 (*humboldti*).

585. Eigenmannia humboldti (Steindachner). *Macana.*

Rio Magdalena, and Rio Mamoni near Panama.

Sternopygus humboldti Steindachner, Fisch-Fauna des Magdalenen-Stromes, 55, 1878, Rio Magdalena, Venezuela.

Order O. SYMBRANCHIA

Family XLI. SYMBRANCHIDÆ. The Symbranchoid Eels.

Genus 149. **SYMBRANCHUS** Bloch.

Symbranchus Bloch, Ichthyologia, IX, 87, 1795 (*marmoratus*).

586. Symbranchus marmoratus Bloch.

Tropical America, in streams from the Amazon northward to southern Mexico and St. Lucia.

Symbranchus marmoratus Bloch, Ichthyologia, IX, 87, pl. 418, 1795, Tropical America.

Order P. CARENCHELYI The Long-necked Eels.

Family XLII. DERICHTHYIDÆ.

Genus 150. **DERICHTHYS** Gill.

Derichthys Gill, Am. Nat., XVIII, 1884, 433 (*serpentinus*).

587. Derichthys serpentinus Gill.

Gulf Stream.

Derichthys serpentinus Gill, Am. Nat., XVIII, 1884, 433, Gulf Stream at Albatross Station 2094, in 1,022 fathoms.

Order Q. APODES. The Eels.

Suborder ENCHELYCEPHALI. The Eels.

Family XLIII. ANGUILLIDÆ. The True Eels.

Genus 151. ANGUILLA Shaw. *Eels.*

Anguilla Shaw, General Zoology, IV, 15, 1804 (*anguilla*).

588. Anguilla chrysypa Rafinesque. *American Eel; Fresh-water Eel.*

Atlantic Coast of the United States; very abundant from Maine to Mexico, ascending all rivers south of Canada and east of the Rocky Mountains and resident throughout the Mississippi Valley; common in the West Indies.

Anguilla chrysypa Rafinesque, Amer. Month. Mag. and Crit. Rev. 1817, 120, Lake George, Hudson River, and Lake Champlain.

Family XLIV. SIMENCHELYIDÆ. The Snub-nosed Eels.

Genus 152. SIMENCHELYS Gill.

Simenchelys Gill, in Goode & Bean, Bull. Essex Inst., 27, 1879 (*parasiticus*).

589. Simenchelys parasiticus Gill.

Offshore banks, in deep water, south of Newfoundland; also recorded from the Azores.

Simenchelys parasiticus Gill, in Goode & Bean, Bull. Essex Inst., 27, 1879, Newfoundland Banks.

Family XLV. ILYOPHIDÆ. The Ooze Eels.

Genus 153. ILYOPHIS Gilbert.

Ilyophis Gilbert, Proc. U. S. Nat. Mus. 1891, 351 (*brunneus*).

590. Ilyophis brunneus Gilbert.

One specimen from Chatham Island, Galapagos Archipelago, in 634 fathoms.

Ilyophis brunneus Gilbert, Proc. U. S. Nat. Mus. 1891, 352, Chatham Island; Galapagos Archipelago, at Albatross Station 2808, in 634 fathoms.

Family XLVI. SYNAPHOBRANCHIDÆ.

Genus 154. SYNAPHOBRANCHUS Johnson.

Synaphobranchus Johnson, Proc. Zool. Soc. Lond. 1862, 169 (*kaupii*).

591. Synaphobranchus pinnatus (Gronow).

North Atlantic and western Pacific; common about the Madeiras, Canaries, etc., and also about the banks of Newfoundland.

Muræna pinnata Gronow, Cat. Fish. Brit. Mus., 19, 1854, locality unknown.

Genus 155. HISTIOBRANCHUS Gill.

Histiobranchus Gill, Proc. U. S. Nat. Mus. 1883, 255 (*infernalis*).

592. Histiobranchus bathybius (Günther).

Northern and western Pacific in deep water; Bering Strait; off Japan and off Cape of Good Hope; one specimen obtained by Dr. Gilbert in Bering Sea in 1890.

Synaphobranchus bathybius Günther, Ann. and Mag. Nat. Hist., XX, 1877, 445, and in Voy. Challenger, 254, pl. 62, fig. *b*, 1887, off Yedo; North Pacific; also between Cape of Good Hope and Kerguelen Island.

593. Histiobranchus infernalis Gill.

Gulf Stream.

Histiobranchus infernalis Gill, Proc. U. S. Nat. Mus. 1883, 255, Gulf Stream, *at Albatross Station 2037*, 38° 30′ N., 69° W., in 1,731 fathoms.

Family XLVII. LEPTOCEPHALIDÆ. The Conger Eels.

Genus 156. LEPTOCEPHALUS (Gronow) Scopoli. *Conger Eels.*

Leptocephalus (Gronow) Scopoli, Int. Hist. Nat., 453, 1777 (*morrissi*).

594. Leptocephalus conger (Linnæus). *Conger Eel.*

Atlantic Ocean; generally common on both coasts, from Cape Cod to Brazil; also on coasts of Asia and Africa.

Muræna conger Linnæus, Syst. Nat., ed. x, 245, 1758, Mediterranean Sea.

595. Leptocephalus caudilimbatus (Poey).

Tropical parts of Atlantic; Pensacola to Cuba and Madeira.

Echelus caudilimbatus Poey, Repertorio, II, 249, 1867, Cuba.

Genus 157. CONGERMURÆNA Kaup.

Congermuræna Kaup, Apodes, 108, 1856 (*balearica*).

596. Congermuræna balearica (De la Roche).

Tropical parts of the Atlantic and eastern Pacific; known from the Mediterranean, Cuba, Brazil, St. Helena, Cape San Lucas, and the Galapagos.

Muræna balearica De la Roche, Ann. Mus., XIII, 1809, 327, fig. 3, Balearic Islands.

597. Congermuræna macrura (Gilbert).

Gulf of California.

Ophisoma macrurum Gilbert, Proc. U. S. Nat. Mus. 1891, 351, Gulf of California, at Albatross Station 3015.

598. Congermuræna prorigera (Gilbert).

Panama to Ecuador.

Ophisoma prorigerum Gilbert, Proc. U. S. Nat. Mus. 1891, 350, coast of Ecuador, at Albatross Station 2792, in 401 fathoms; also at station 2799, near Panama.

599. Congermuræna nitens (Jordan & Bollman).

One specimen dredged at Albatross Station 2801, off Panama, 8° 47′ N., 79° 29′ 30″ W., in 14 fathoms.

Ophisoma nitens Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 153, Panama.

600. Congermuræna flava Goode & Bean.

Albatross Stations 2121 and 2122, in 31 to 34 fathoms; Station 2402, in 111 fathoms; also Blake Station 264, in 84 fathoms.

Congermuræna flava Goode & Bean, Oceanic Ichthyology, 138, fig. 159, 1896, Gulf Stream.

Genus 158. UROCONGER Kaup.

Uroconger Kaup, Apodes, 110, 1856 (*lepturus*).

601. Uroconger vicinus Vaillant.

Deep waters off the coast of northern Africa; a young individual at Albatross Station 2161, in 146 fathoms.

Uroconger vicinus Vaillant, Expéd. Travailleur et Talisman, 86, pl. 6, fig. 1, 1888, Banc d'Arguin, off Soudan, off Cape Verde Islands.

Family XLVIII. MURÆNESOCIDÆ.

Genus 159. MURÆNESOX McClelland.

Muræsox McClelland, Calcutta Jour. Nat. Hist., IV, 1843, 408 (*tricuspidata*).

Subgenus MURÆNESOX McClelland.

602. Muræsox coniceps Jordan & Gilbert.

Cape San Lucas to the coast of Colombia; generally common.

Muræsox coniceps Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 348, Mazatlan, Mexico.

603. Muræsox savanna (Cuvier).

Cuba to Rio Janeiro, not common; occasional in the Mediterranean Sea.

Muræna savanna Cuvier, Règne Animal, ed. 2, vol. 2, 350, 1829, Martinique.

Genus 160. XENOMYSTAX Gilbert.

Xenomystax Gilbert, Proc. U. S. Nat. Mus. 1891, 348 (*atrarius*).

604. Xenomystax atrarius Gilbert.

Coast of Ecuador.

Xenomystax atrarius Gilbert, Proc. U. S. Nat. Mus. 1891, 348, 1° S., 81° W., at Albatross Station 2792, in 401 fathoms.

Genus 161. HOPLUNNIS Kaup.

Hoplunnis Kaup, Aale Hamb. Mus., 19, 1859 (*schmidtii*).

605. Hoplunnis schmidtii Kaup.

Caribbean Sea at Puerto Cabello, near Aspinwall.

Hoplunnis schmidtii Kaup, Aale Hamb. Mus., 19, pl. 2, fig. 4, 1859, Puerto Cabello, near Aspinwall.

606. Hoplunnis diomedianus Goode & Bean.

A single individual was obtained by the Albatross at Station 2402, Gulf of Mexico, 28° 36′ N., 86° 50′ W., 111 fathoms.

Hoplunnis diomedianus Goode & Bean, Oceanic Ichthyology, 146, 1896, Gulf of Mexico.

Genus 162. NEOCONGER Girard.

Neoconger Girard, U. S. Mex. Bound. Surv., Ichth., 77, 1859 (*mucronatus*).

607. Neoconger mucronatus Girard.

Coast of Texas.

Neoconger mucronatus Girard, U. S. Mex. Bound. Surv., Ichth., 77, 1859, St. Joseph Island, Texas.

608. Neoconger vermiformis Gilbert.

Lower California and Panama.

Neoconger vermiformis Gilbert, Proc. U. S. Nat. Mus. 1890, 57, off Lower California, at Albatross Station 3035, in about 30 fathoms.

Genus 163. LEPTOCONGER Poey.

Leptoconger Poey, Anales Hist. Nat. Esp., 250, 1880 (*perlongus*).

609. Leptoconger perlongus (Poey).

Matanzas, Cuba.

Neoconger perlongus Poey, Ann. Lyc. Nat. Hist. N. Y., 1874, 67, pl. 9, fig. 3–4, Matanzas, Cuba.

Genus 164. STILBISCUS Jordan & Bollman.

Stilbiscus Jordan & Bollman, Proc. U. S. Nat. Mus. 1888, 549 (*edwardsi*).

610. Stilbiscus edwardsi Jordan & Bollman.

Green Turtle Cay, one of the Bahamas.

Stilbiscus edwardsi Jordan & Bollman, Proc. U. S. Nat. Mus. 1888, 549, Green Turtle Cay, Bahamas.

Genus 165. GORDIICHTHYS Jordan & Davis.

Gordiichthys Jordan & Davis, Prelim. Review Apodal Fishes, in Rept. U. S. Fish Com. 1888 (1892), 644 (*irretitus*).

611. Gordiichthys irretitus Jordan & Davis.

Snapper Banks off west Florida, in rather deep water.

Gordiichthys irretitus Jordan & Davis, Apodal Fishes, 644, 1892, off Pensacola, Florida.

Family XLIX. NETTASTOMIDÆ. The Sorcerers.

Genus 166. CHLOPSIS Rafinesque.

Chlopsis Rafinesque, Indice Ittiol. Sicil., 58, 1810 (*bicolor*).

612. Chlopsis equatorialis Gilbert.

Coast of Ecuador.

Chlopsis equatorialis Gilbert, Proc. U. S. Nat. Mus. 1891, 347, off coast of Ecuador, 1° S., 81° W., at Albatross Station 2792, in 401 fathoms.

Genus 167. VENEFICA Jordan & Davis.

Venefica Jordan & Davis, Apodal Fishes, 651, 1892 (*procera*).

613. Venefica procera (Goode & Bean).

Gulf Stream; also taken off San Pedro, California.

Nettastoma procerum Goode & Bean, Bull. Mus. Comp. Zool., x, 224, 1883, Gulf Stream, at Albatross Station 325, 33° 35′ 20″ N., 76° W., in 647 fathoms; also at Station 327.

Family L. NEMICHTHYIDÆ. The Snipe Eels.

Genus 168. SERRIVOMER Gill & Ryder.

Serrivomer Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 260 (*beanii*).

614. Serrivomer beanii Gill & Ryder.

Gulf Stream; also taken in the Gulf of California.

Serrivomer beanii Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 261, Gulf Stream, latitude 41° 40′ 30″, longitude 65° 28′ 30″, in 855 fathoms.

Genus 169. SPINIVOMER Gill & Ryder.

Spinivomer Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 261 (*goodei*).

615. Spinivomer goodei Gill & Ryder.

Gulf Stream.

Spinivomer goodei Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 261, Gulf Stream, at latitude 38° 19′ 26″, longitude 68° 20′ 20″, in 2,361 fathoms.

Genus 170. AVOCETTINA Jordan & Davis.

Avocettina Jordan & Davis, Apodal Fishes, 655, 1892 (*infans*).

616. Avocettina infans (Günther).

Known from West Indies, mid-Atlantic, off Pernambuco.

Nemichthys infans Günther, Ann. and Mag. Nat. Hist. 1878, 24, and in Voy. Challenger, XXII, 264, 1887, mid-Atlantic, in 2,500 fathoms.

617. Avocettina gilli (Bean).

Coast of southeastern Alaska in deep water.

Labichthys gilli Bean, Proc. U. S. Nat. Mus. 1890, 45, east of Prince of Wales Island, Alaska.

Genus 171. LABICHTHYS Gill & Ryder.

Labichthys Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 261 (*carinatus*).

618. Labichthys carinatus Gill & Ryder.

Gulf Stream.

Labichthys carinatus Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 253, 255, 261, Gulf Stream, 41° 13′ N., 65° 33′ W.

619. Labichthys elongatus Gill & Ryder.

Gulf Stream.

Labichthys elongatus Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 262, Gulf Stream, at Albatross Station 2100, 39° 22′ N., 68° 34′ W.

An Avocettula? see fig.

Genus 172. NEMICHTHYS Richardson.

Nemichthys Richardson, Voy. Samarang, 16, 1848 (*scolopaceus*).

620. Nemichthys scolopaceus Richardson. *Snipe Eel.*

Atlantic Ocean, in deep water; many specimens taken off the New England coast and off the Grand Banks; common about Madeira.

Nemichthys scolopacea Richardson, Voy. Samarang, 25, 1848, South Atlantic.

621. Nemichthys avocetta Jordan & Gilbert.

Puget Sound near Seattle; only the type known.

Nemichthys avocetta Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 409, harbor of Port Gamble, Puget Sound, near Seattle.

Family LI. MYRIDÆ. The Worm Eels.

Genus 173. AHLIA Jordan & Davis.

Ahlia Jordan & Davis, Apodal Fishes, 639, 1892 (*egmontis*).

622. Ahlia egmontis (Jordan).

Egmont Key, Florida.

Myrophis egmontis Jordan, Proc. Ac. Nat. Sci. Phila. 1884, 44, Egmont Key.

Genus 174. MYROPHIS Lütken.

Myrophis Lütken, Vidensk. Meddel. Naturg. Foren. Kjöbenhavn, 1, 9, 1851 (*punctatus*).

623. Myrophis punctatus Lütken.

West Indies; coast of Texas to Surinam; common along our Gulf Coast.

Myrophis punctatus Lütken, Vidensk. Meddel. Naturg. Foren. Kjöbenhavn, 1, 9, 1851, West Indies.

624. Myrophis vafer Jordan & Gilbert.

Pacific Coast of Tropical America, from Guaymas to Panama.

Myrophis vafer Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 645, Panama.

Genus 175. CHILORHINUS Lütken.

Chilorhinus Lütken, Vidensk. Meddel. Naturg. Foren. Kjöbenhavn, 1, 9, 1851 (*suensonii*).

625. Chilorhinus suensonii Lütken.

St. Croix, West Indies.

Chilorhinus suensonii Lütken, Vidensk. Meddel. Naturg. Foren. Kjöbenhavn, 1, 9, 1851, St. Croix, West Indies.

Family LII. OPHICHTHYIDÆ. The Snake Eels.

Genus 176. SPHAGEBRANCHUS Bloch.

Sphagebranchus Bloch, Ichthyologia, IX, 88, pl. 419, 1795 (*rostratus*).

626. Sphagebranchus anguiformis (Peters).

Open Atlantic, near the West Indies.

Ophichthys (*Sphagebranchus*) *anguiformis* Peters, Berlin. Monatsber. 1876, 849, Atlantic Ocean, 15° 40′ N., 23° 5′ W.

627. Sphagebranchus selachops (Jordan & Gilbert).

Rocks about Cape San Lucas.

Apterichthys selachops Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 356, Cape San Lucas.

Genus 177. VERMA Jordan & Evermann.

Verma Jordan & Evermann, Fishes N. and M. Amer., 374, 1896 (*kendalli*).

628. Verma kendalli (Gilbert).

Coast of Florida, in rather deep water.

Sphagebranchus kendalli Gilbert, Bull. U. S. Fish Com., IX, 1889 (1891), 310, off west coast of Florida, 25° 34′ N., 82° 50′ W., in 25 fathoms.

Genus 178. LETHARCHUS Goode & Bean.

Letharchus Goode & Bean, Proc. U. S. Nat. Mus. 1882, 437 (*velifer*).

629. Letharchus velifer Goode & Bean.

Coast of Florida, in rather deep water; known only from the Snapper Banks off Pensacola and Tampa.

Letharchus velifer Goode & Bean, Proc. U. S. Nat. Mus. 1882, 437, West Florida.

Genus 179. MYRICHTHYS Girard.

Myrichthys Girard, Proc. Ac. Nat. Sci. Phila. 1859, 58 (*tigrinus*).

630. Myrichthys tigrinus Girard.

Pacific Coast of Mexico; rather common about Mazatlan, and occasionally ranging northward.

Myrichthys tigrinus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 58, Adair Bay, Oregon.

631. Myrichthys oculatus (Kaup).

Tropical Atlantic; Cuba to Surinam, and Cape Verde Islands.

Pisoodonophis oculatus Kaup, Apodes, 22, 1856, Curaçoa.

632. Myrichthys acuminatus (Gronow).

West Indies, occasionally northward to Florida Keys.

Muræna acuminata Gronow, Fishes Brit. Mus., 21, 1854, Insula Div. Eustachii.

Genus 180. PISOODONOPHIS Kaup.

Pisoodonophis Kaup, Apodal Fishes, 17, 1856 (*boro*).

633. Pisoodonophis cruentifer Goode & Bean.

Two specimens at Station 1035 of U. S. Fish Commission steamer *Fish Hawk*, 39° 57′ N., 69° 28′ W., in 120 fathoms; four others at nearly same region in 245 fathoms.

Pisoodonophis cruentifer Goode & Bean, Oceanic Ichthyology, 147, fig. 166, 1896, Gulf Stream.

Genus 181. CALLECHELYS Kaup.

Callechelys Kaup, Apodes, 28, 1856 (*guichenoti*).

634. Callechelys muræna Jordan & Evermann.

Snapper Banks off Pensacola.

Callechelys muræna Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 466, Snapper Banks.

Genus 182. BASCANICHTHYS Jordan & Davis.

Bascanichthys Jordan & Davis, Apodal Fishes, 621, 1892 (*bascanium*).

635. Bascanichthys scuticaris (Goode & Bean).

West coast of Florida.

Sphagebranchus scuticaris Goode & Bean, Proc. U. S. Nat. Mus. 1879, 343, Cedar Key, Florida.

636. Bascanichthys peninsulæ (Gilbert).

La Paz Bay, Gulf of California.

Callechelys peninsulæ Gilbert, Proc. U. S. Nat. Mus. 1891, 548, La Paz Bay.

637. Bascanichthys bascanium (Jordan).

Egmont Key, Florida.

Cæcula bascanium Jordan, Proc. Ac. Nat. Sci. Phila. 1884, 43, Egmont Key, Florida.

Myrichthys tigrinus. Known [illegible] afts.
only, [illegible] & [illegible] from it.
Mc Xyelinus [illegible]
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Pisoodonophis

Gulbert
Panama.

Genus 183. QUASSIREMUS Jordan & Davis.

Quassiremus Jordan & Davis, Apodal Fishes, 622, 1892 (*evionthas*).

638. Quassiremus nothochir (Gilbert).

San Josef Island, Gulf of California.

Ophichthys nothochir Gilbert, Proc. U. S. Nat. Mus. 1890, 58, San Josef Island, Gulf of California.

639. Quassiremus evionthas (Jordan & Bollman).

Hood Island, Galapagos Archipelago.

Ophichthus evionthas Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 154, Hood Island, Galapagos Archipelago.

Genus 184. OPHICHTHUS Thunberg & Ahl.

Ophichthus Thunberg & Ahl, De Muraena et Ophichtho, 1789 (*ophis*).

Subgenus CRYPTOPTERUS Kaup.

Cryptopterus Kaup, Aale Hamburg, 1859 (*puncticeps*).

640. Ophichthus puncticeps (Kaup).

Caribbean Sea at Puerto Cabello, near Aspinwall.

Cryptopterus puncticeps Kaup, Aale Hamb. Mus., II, pl. 1, fig. 2, 1859, Puerto Cabello, Caribbean Sea.

Subgenus OPHICHTHUS Thunberg & Ahl.

641. Ophichthus havannensis (Bloch & Schneider).

West Indies; apparently not common.

Muræna havannensis Bloch & Schneider, Syst. Ichth., 491, 1801, Havana; after Parra.

642. Ophichthus retropinnis (Eigenmann).

Snapper Banks, off Pensacola, Florida.

Ophichthys retropinnis Eigenmann, Proc. U. S. Nat. Mus. 1887, 116, Snapper Banks, off Pensacola.

Subgenus MURÆNOPSIS Kaup.

Muræmopsis Kaup, Apodes, 11, 1856 (*ocellatus*).

643. Ophichthus guttifer (Bean & Dresel).

Snapper Banks, off Pensacola, Florida.

Ophichthys guttifer Bean & Dresel, Proc. Biol. Soc. Wash., II, 1884, 100, Snapper Banks, off Pensacola, Florida.

644. Ophichthus ocellatus (LeSueur).

West Indies, south to Brazil and north to Pensacola.

Muræmophis ocellatus LeSueur, Jour. Ac. Nat. Sci. Phila., V, 1825, 108, pl. 4, fig. 3, South America.

645. Ophichthus triserialis (Kaup).

Pacific Coast of Tropical America, rather common, from Lower California to the Galapagos.

Muræmopsis triserialis Kaup, Apodes, 12, 1856, Pacific.

Subgenus SCYTALOPHIS Kaup.

Scytalophis Kaup, Apodes, 13, 1856 (*magnioculis*).

646. Ophichthus gomesii (Castelnau). *Sea Serpent; Sea Eel; Whipsnake Eel.*

South Carolina to Rio Janeiro; generally common, especially about the Florida Keys and Cuba.

Ophisurus gomesii Castelnau, Anim. Am. Sud, 84, pl. 44, fig. 2, 1855, Rio Janeiro.

647. Ophichthus zophochir (Jordan & Gilbert).

Pacific Coast of Mexico, Guaymas to Acapulco.

Ophichthys zophochir Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 347, Mazatlan, Mexico.

648. Ophichthus magnioculis (Kaup).
West Indies to Brazil; Aspinwall.
Scytalophis magnioculis Kaup, Apodes, 13, fig. 7, 1856, St. Croix and Brazil.

649. Ophichthus parilis (Richardson).
Cuba to Brazil.
Ophisurus parilis Richardson, Voy. Erebus and Terror, 105, 1844, West Indies.

Genus 185. MYSTRIOPHIS Kaup.
Mystriophis Kaup, Apodes, 10, 1856 (*rostellatus*).

Subgenus ECHIOPSIS Kaup.
Echiopsis Kaup, Abhandl. Natur. Verein Hamburg, IV, 13, 1860 (*intertinctus*).

650. Mystriophis intertinctus (Richardson).
West Indies, north to Pensacola, Florida.
Ophisurus intertinctus Richardson, Voy. Erebus and Terror, Fishes, 102. 1844, West Indies.

Genus 186. SCYTALICHTHYS Jordan & Davis.
Scytalichthys Jordan & Davis, Apodal Fishes, 635, 1892 (*miurus*).

651. Scytalichthys miurus (Jordan & Gilbert).
Cape San Lucas, Lower California.
Ophichthys miurus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 357, Cape San Lucas, Lower California.

Genus 187. BRACHYSOMOPHIS Kaup.
Brachysomophis Kaup, Apodes, 9, 1856 (*horridus*).

652. Brachysomophis crocodilinus (Bennett).
East Indies; a specimen recorded by Günther from the Galapagos.
Ophisurus crocodilinus Bennett, Proc. Zool. Soc. Lond. 1833, 32, Mauritius.

Suborder COLOCEPHALI.

Family LIII. MURÆNIDÆ. The Morays.

Genus 188. ENCHELYCORE Kaup.
Enchelycore Kaup, Apodes, 72, 1856 (*eurgrhina*).

653. Enchelycore nigricans (Bonnaterre).
West Indies; rather common.
Muræna nigricans Bonnaterre, Encycl. Meth. Ichth., 34, 1788, South America; after Gronow.

Genus 189. PYTHONICHTHYS Poey.
Pythonichthys Poey, Repertorio, II, 265, 1867 (*sanguineus*).

654. Pythonichthys sanguineus Poey.
Coast of Cuba, in rather deep water.
Pythonichthys sanguineus Poey, Repertorio, II, 265, pl. 2, fig. 7, 1867, Cuba.

Genus 190. RABULA Jordan & Davis.
Rabula Jordan & Davis, Apodal Fishes, 589, 1892 (*aquædulcis*).

655. Rabula aquædulcis (Cope).
Two specimens known, one said to be from San Diego, the type from Rio Grande in Costa Rica.
Muræna aqua-dulcis Cope, U. S. Geol. Surv. Mont., etc., 474, 1871 (1872), Rio Grande near San Jose, Costa Rica.

656. Rabula marmorea (Valenciennes).
Galapagos Islands.
Muranophis marmoreus Valenciennes, Voy. Vénus, Zool., 347, pl. 10, fig. 1, 1855, Galapagos Archipelago.

Lycodontis pictus (Ahl)
Socorro + Clarion),

657. Rabula panamensis (Steindachner).
Pacific Coast of Central America.
Muræna panamensis Steindachner, Ichth. Beit., v, 19, 1876, Panama.

658. Rabula longicauda (Peters).
Tropical Atlantic, off the West Indies.
Muræna longicauda Peters, Berliner Monatsberichte 1876, 850, open Atlantic.

Genus 191. LYCODONTIS McClelland.
Lycodontis McClelland, Calcutta Jour. Nat. Hist., v, No. 18, 1844, 173 (*literata* = *tile*).

Subgenus LYCODONTIS McClelland.

659. Lycodontis verrilli (Jordan & Gilbert).
Panama; one specimen known.
Sidera verrilli Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 623, Panama.

660. Lycodontis vicinus (Castelnau).
Tropical Atlantic, Cuba to Africa and Brazil.
Muræ̃nophis vicina Castelnau, Anim. Amer. Sud, Poiss., 81, pl. 42, fig. 4, 1855, Bahia, Brazil.

661. Lycodontis virescens (Poey).
Cuba.
Gymnothorax virescens Poey, Enumeratio, 156, 1875, Cuba.

662. Lycodontis polygonius (Poey).
Cuba.
Gymnothorax polygonius Poey, Ann. N. Y. Lyc. Nat. Hist. 1870, 68, Havana.

663. Lycodontis moringa (Cuvier). *Common Spotted Moray; Hamlet; Eel.*
West Indies, Pensacola to Rio Janeiro and St. Helena.
Muræna moringa Cuvier, Règne Animal, ed. II, vol. 2, 352, 1829, Bahamas; after Catesby.

664. Lycodontis mordax (Ayres). *Conger Eel of California.*
Point Conception to Cerros Island; abundant about the Santa Barbara Islands.
Muræna mordax Ayres, Proc. Ac. Nat. Sci. Cal. 1859, 30, Cerros Island.

665. Lycodontis funebris (Ranzani). *Black Moray; Morena Verde.*
Tropical America on both coasts; common from Florida Keys to Rio Janeiro, and from Gulf of California to Panama.
Gymnothorax funebris Ranzani, Nov. Com. Ac. Sci. Inst. Bonon., IV, 76, 1840, Brazil.

666. Lycodontis castaneus (Jordan & Gilbert.)
Pacific coast from Gulf of California to Panama
Sidera castanea Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 647, Mazatlan.

667. Lycodontis sanctæ-helenæ (Günther).
Tropical Atlantic; recorded from St. Helena and the Bermudas.
Muræna sanctæ-helenæ Günther, Cat., VIII, 115, 1870, St. Helena.

668. Lycodontis dovii (Günther). *Morena Pintita.*
Gulf of California to the Galapagos Archipelago.
Muræna dovii Günther, Cat., VIII, 103, 1870, Panama.

669. Lycodontis conspersus (Poey).
Cuba to Rio Janeiro.
Gymnothorax conspersus Poey, Repertorio, II, 259, 1868, Cuba.

670. Lycodontis miliaris (Kaup).
West Indies.
Thryscoidea miliaris Kaup, Apodes, 90, 1856, Martinique.

671. Lycodontis elaboratus (Poey).
Cuba.
Muræna elaborata Poey, Memorias, II, 323, 1860, Cuba.

672. Lycodontis obscuratus (Poey).
Cuba.
Gymnothorax obscuratus Poey, Ann. Lyc. Nat. Hist. N. Y., IX, 1870, 320. Cuba.

673. Lycodontis chlevastes (Jordan & Gilbert).
Galapagos Islands.
Sidera chlevastes Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 208, Galapagos Islands.

Subgenus PRIODONOPHIS Kaup.
Priodonophis Kaup, Aalenahnliche Fische Hamburg Museum, 22, 1859 (*ocellatus*).

674. Lycodontis ocellatus (Agassiz). *Spotted Moray; Moray Eel.*
Pensacola to Rio Janeiro.
Gymnothorax ocellatus Agassiz, Spix, Pisc. Brasil., 91, pl. 50*b*, 1828, Brazil.

674a. Lycodontis ocellatus saxicola (Jordan & Davis).
Snapper Banks off Pensacola and deep water off Cuba.
Gymnothorax ocellatus saxicola Jordan & Davis, Apodal Fishes, 606, 1892, Snapper Banks off Pensacola, Florida.

674b. Lycodontis ocellatus nigromarginatus (Girard).
Coasts of west Florida and Texas.
Neomuræna nigromarginata Girard, U. S. and Mex. Bound. Surv., 76, pl. 41, 1859, St. Joseph Island, Texas.

Genus 192. MURÆNA (Artedi) Linnæus. *Morays.*
Muræna Artedi, in Linnæus, Syst. Nat., ed. X, 244, 1758 (*helena*).

675. Muræna insularum Jordan & Davis.
Galapagos Islands.
Muræna insularum Jordan & Davis, Apodal Fishes, 609, 1892, Chatham Island, Galapagos Islands.

676. Muræna argus (Steindachner).
Altata, west coast of Mexico.
Gymnothorax (*Limamuræna*) *argus* Steindachner, Ichth. Notizen, X, 17, pl. IV, 1870, Altata, west coast of Mexico.

677. Muræna retifera Goode & Bean.
Coast of South Carolina, in rather deep water.
Muræna retifera Goode & Bean, Proc. U. S. Nat. Mus. 1882, 435, off Charleston.

678. Muræna melanotis (Kaup).
Tropical Atlantic, from Africa to South America.
Limamuræna melanotis Kaup, Aale Hamb. Mus., 27, pl. 4, fig. 3, 1860.

679. Muræna lentiginosa Jenyns. *Morena Pinta.*
Pacific Coast of America from Gulf of California to Galapagos.
Muræna lentiginosa Jenyns, Voy. Beagle, Zool., 143, 1842, Galapagos Islands.

Genus 193. ECHIDNA Forster.
Echidna Forster, Enchiridion, 31, 1778 (*variegata*).

680. Echidna nocturna (Cope).
Pacific Coast of Mexico, the two known specimens from Rio Grande, in Costa Rica, and from Cape San Lucas.
Pœcilophis nocturnus Cope, U. S. Geol. Surv. Mont., 474, 1871 (1872), Rio Grande at San Jose, Costa Rica.

681. Echidna catenata (Bloch).
West Indies, from Bermuda to Surinam; our specimens from San Lucia.
Gymnothorax catenatus Bloch, Ausl. Fische, XII, 74, pl. 415, fig. 1, 1795, Coromandel; an error.

Genus 194. UROPTERYGIUS Ruppell.

Uropterygius Ruppell, Neue Wirbelthiere, Fische, 83, 1838 (*concolor*).

Subgenus SCUTICA Jordan & Evermann.

Scutica Jordan & Evermann, Fishes North and Middle America, 404, 1896 (*necturus*).

682. Uropterygius necturus (Jordan & Gilbert).

Gulf of California.

Gymnomuræna nectura Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 356, Cape San Lucas.

Genus 195. CHANNOMURÆNA Richardson.

Channo-muræna Richardson, Voy. Erebus and Terror, 96, 1844 (*vittata*).

683. Channomuræna vittata (Richardson).

Coasts of Cuba.

Ichthyophis vittatus Richardson, Voy. Sulph., Fish., 114, pl. 53, figs. 7-9, 1844, locality uncertain.

Order R. LYOMERI. The Gulpers.

Family LIV. SACCOPHARYNGIDÆ. The Gulpers.

Genus 196. SACCOPHARYNX Mitchill.

Saccopharynx Mitchill, Ann. Lyc. Nat. Hist. N. Y. 1824, 82 (type afterwards called *S. flagellum*).

684. Saccopharynx ampullaceus (Harwood).

Atlantic.

Ophiognathus ampullaceus Harwood, Phil. Trans. 1827, 52, Atlantic.

Family LV. EURYPHARYNGIDÆ.

Genus 197. GASTROSTOMUS Gill & Ryder.

Gastrostomus Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 271 (*bairdii*).

685. Gastrostomus bairdii Gill & Ryder.

Deep water off Newfoundland Banks and Davis Strait.

Gastrostomus bairdii Gill & Ryder, Proc. U. S. Nat. Mus. 1883, 271, off the Grand Banks.

Order S. ISOSPONDYLI. The Isospondylous Fishes.

Family LVI. ELOPIDÆ. The Tarpons.

Genus 198. TARPON Jordan & Evermann. *Grand Écaille.*

Tarpon Jordan & Evermann, Fishes North and Middle America, 409, 1896 (*atlanticus*).

686. Tarpon atlanticus (Cuvier & Valenciennes). *Tarpon; Tarpum; Grand Écaille.*

Long Island to Brazil.

Megalops atlanticus Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 398, 1846, Guadeloupe; San Domingo; Martinique; Porto Rico.

Genus 199. ELOPS Linnæus.

Elops Linnæus, Syst. Nat., ed. XII, 518, 1766 (*saurus*).

687. Elops saurus Linnæus. *Tenpounder; John-Mariggle; Bony-fish; Bone-fish; Big-eyed Herring; Matajuelo Real; Lisa Francesa.*

Tropical seas; common north to the Gulf of California and to Long Island on the Atlantic Coast.

Elops saurus Linnæus, Syst. Nat., ed. XII, 518, 1766, Carolina.

Family LVII. ALBULIDÆ. The Lady-Fishes.

Genus 200. ALBULA (Gronow) Bloch & Schneider.

Albula Gronow, Zoophyl., 102, 1763 (nonbinomial).

688. Albula vulpes (Linnæus). *Lady-fish; Bone-fish; Macabi; Banana-fish.*

Tropical seas, ranging northward to San Diego and Long Island.

Esox vulpes Linnæus, Syst. Nat., ed. x, 313, 1758, Bahamas, etc.; based on the bone-fish, *Vulpes bahamensis*, of Catesby.

Family LVIII. HIODONTIDÆ. The Moon-eyes.

Genus 201. HIODON LeSueur.

Hiodon LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1818, 334 (*tergisus*).

Subgenus AMPHIODON Rafinesque.

Amphiodon Rafinesque, Jour. Physique 1819, 421 (*alosoides*).

689. Hiodon alosoides (Rafinesque). *La Quesche; Naccaysh.*

Ohio River and north to the Saskatchewan.

Amphiodon alosoides (misprinted *alveoides*) Rafinesque, Jour. Phys., Paris, 1819, 421, Ohio River.

Subgenus HIODON LeSueur.

690. Hiodon tergisus LeSueur. *Moon-eye; Toothed Herring.*

Great Lakes and Mississippi Valley, north to Assiniboine River.

Hiodon tergisus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1818, 364, Ohio River.

691. Hiodon selenops Jordan & Bean.

Tennessee, Cumberland, and Alabama rivers.

Hiodon selenops Jordan & Bean, Bull. U. S. Nat. Mus., x, 67, 1877, Chattanooga, Tennessee.

Family LIX. CHANIDÆ. The Milk-Fishes.

Genus 202. CHANOS Lacépède.

Chanos Lacépède, Hist. Nat. Poiss., v, 395, 1803 (*arabicus*).

692. Chanos chanos (Forskål). *Milkfish; Sabalo; Aua; Chani; Anged.*

Pacific and Indian oceans, north to Hawaiian Islands and Gulf of California.

Mugil chanos Forskål, Deser. Anim., 74, 1775, Red Sea at Djidda, Arabia.

Family LX. DOROSOMATIDÆ. The Gizzard Shads.

Genus 203. DOROSOMA Rafinesque. *Gizzard Shad.*

Dorosoma Rafinesque, Ichth. Ohiensis, 39, 1820 (*notata* = *cepedianum*).

693. Dorosoma cepedianum (LeSueur). *Gizzard Shad; Hickory Shad.*

Cape Cod to Mexico; from New Jersey and the Great Lakes to Nebraska and Texas.

Megalops cepediana LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1818, 361, Delaware and Chesapeake bays.

693a. Dorosoma cepedianum exile Jordan & Gilbert.

Coastal region of Texas.

Dorosoma cepedianum exile Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 585, Galveston, Texas.

694. Dorosoma mexicanum (Günther).

East coast of Mexico.

Chatoëssus mexicanus Günther, Cat., VII, 409, 1868, Mexico.

695. Dorosoma petenense (Günther).

Lake Peten, Yucatan.

Chatoëssus petenensis Günther, Cat., VII, 408, 1868, Lake Peten, Yucatan.

Dixonia nemoplera Dow
San Domingo, 19..

Elattoneura chrysopsis = impluviorum Kirk
689. 1909.

D. alchafalaica
Dist. R. La.
Evermann

Family LXI. CLUPEIDÆ. The Herrings.

Genus 204. JENKINSIA Jordan & Evermann.

Jenkinsia Jordan & Evermann, Fishes N. and M. Amer., 418, 1896 (*stolifera*).

696. Jenkinsia acuminata (Gilbert).

Gulf of California.

Etrumeus acuminatus Gilbert, Proc. U. S. Nat. Mus. 1890, 56, Gulf of California.

697. Jenkinsia lamprotænia (Gosse).

Jamaica.

Clupea lamprotænia Gosse, Nat. Sojourn Jam., 291, pl. 1, fig. 2, 1851, Jamaica.

698. Jenkinsia stolifera (Jordan & Gilbert).

Gulf of Mexico from Florida to Yucatan.

Dussumieria stolifera Jordan & Gilbert, Proc. U. S. N. M. 1884, 25, Key West.

Genus 205. ETRUMEUS Bleeker.

Etrumeus Bleeker, Verh. Bat. Gen. Japan, xxv, 58, 1853 (*micropus*, a Japanese species).

699. Etrumeus sadina (Mitchill). *Round Herring.*

Cape Cod to Gulf of Mexico.

Clupea sadina Mitchill, Trans. Lit. Phil. Soc. N. Y. 1815, 457, New York.

Genus 206. PERKINSIA Rosa Smith Eigenmann.

Perkinsia Rosa Smith Eigenmann, Am. Nat., February, 1891, 153 (*othonops*).

700. Perkinsia othonops Rosa Smith Eigenmann.

Point Loma, San Diego.

Perkinsia othonops Rosa Smith Eigenmann, Am. Nat., February, 1891, 152, San Diego, Cal.

Genus 207. CLUPEA (Artedi) Linnæus.

Clupea (Artedi) Linnæus, Syst. Nat., ed. x, 317, 1758 (*harengus*).

701. Clupea harengus Linnæus. *Common Herring.*

North Atlantic Ocean, south on our coast to Sandy Hook.

Clupea harengus Linnæus, Syst. Nat., ed. x, 317, 1758, seas of Europe.

702. Clupea pallasii Cuvier & Valenciennes. *California Herring*

Pacific Coast from Kamchatka to San Diego.

Clupea pallasii Cuvier & Valenciennes, Hist. Nat. Poiss., xx, 253, 1847, Kamchatka; based on Pallas's specimens.

Genus 208. ~~CLUPANODON~~ Lacépède. Sardinella

Clupanodon Lacépède, Hist. Nat. Poiss., v, 468, 1803 (*pilchardus*, etc.).

703. Cl~~upanodon~~ Sardinella cœruleus (Girard). *California Sardine.* Sardinia

Pacific Coast, from Puget Sound to Magdalena Bay.

Maletta cœrulea Girard, Proc. Ac. Nat. Sci. Phila. 1854, 138, San Francisco.

704. Clupanodon pseudohispanicus (Poey). *Sardina de España.* Sardinia

Gulf of Mexico, Cuba, Pensacola, and Tampa; northward to Cape Cod.

Sardinia pseudohispanica Poey, Memorias, II, 311, 1860, Cuba.

Genus 209. POMOLOBUS Rafinesque.

Pomolobus Rafinesque, Ichth. Ohiensis, 38, 1820 (*chrysochloris*).

705. Pomolobus chrysochloris Rafinesque. *Skipjack; Blue Herring.*

Gulf of Mexico and Mississippi Valley; Lake Erie and Lake Michigan.

Pomolobus chrysochloris Rafinesque, Ichth. Ohiensis, 38, 1820, Ohio River.

706. Pomolobus mediocris (Mitchill). *Hickory Shad; Hickory Jack; Fall Herring; Tailor Herring; Mattowacca.*

Atlantic Coast of United States from Maine to Florida.

Clupea mediocris Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 450, New York.

707. Pomolobus pseudoharengus (Wilson). *Alewife; Branch Herring; Gaspereau; Wall-eyed Herring; Big-eyed Herring; Ellwife;. Bang.*

Atlantic Coast of United States; Lake Ontario.

Clupea pseudoharengus Wilson, Rees's Encycl., IX, about 1811, probably Delaware River near Philadelphia.

708. Pomolobus æstivalis (Mitchill). *Glut Herring; Blueback; Blackback; Summer Herring; Kyack; Saw-belly.*

Atlantic Coast.

Clupea æstivalis Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 456, New York.

Genus 210. ALOSA Cuvier. *The Shad.*

Alosa Cuvier, Règne Animal, ed. 2, II, 319, 1829 (*alosa*).

709. Alosa alabamæ Jordan & Evermann. *Alabama Shad.*

Gulf Coast of United States.

Alosa alabamæ Jordan & Evermann, Rept. U. S. Fish Com. 1895 (1896), 203, Black Warrior River, Tuscaloosa, Alabama.

710. Alosa sapidissima (Wilson). *Common Shad; American Shad; North River Shad; Potomac Shad; Connecticut Shad; Delaware Shad.*

Atlantic Coast of United States from Miramachi River to Florida; from Monterey northward on the Pacific Coast, as an introduced species.

Clupea sapidissima Wilson, Rees's New Cyclopedia, IX, no pagination nor date, but prior to 1812, probably Philadelphia.

Genus 211. SARDINELLA Cuvier & Valenciennes. *Scaled Sardines.*

Sardinella Cuvier & Valenciennes, Hist. Nat. Poiss., XX, 261, 1847 (*aurita*).

Subgenus SARDINELLA Cuvier & Valenciennes.

711. Sardinella anchovia Cuvier & Valenciennes.

Martinique to Brazil.

Sardinella anchovia Cuvier & Valenciennes, Hist. Nat. Poiss., 269, 1847, Rio Janeiro; Martinique.

712. Sardinella clupeola (Cuvier & Valenciennes).

Guadeloupe.

Harengula clupeola Cuvier & Valenciennes, Hist. Nat. Poiss., XX, 289, 1847, Guadeloupe.

713. Sardinella apicalis (Müller & Troschel).

Barbados.

Alosa apicalis Müller & Troschel, in Schomburgk, Hist. Barbados, 675, 1848, Barbados.

714. Sardinella bischopi (Müller & Troschel).

Barbados.

Alosa bischopi Müller & Troschel, in Schomburgk, Hist. Barbados, 675, 1848, Barbados.

Subgenus HARENGULA Cuvier & Valenciennes.

Harengula Cuvier & Valenciennes, Hist. Nat. Poiss., XX, 280, 1847 (*latula*).

715. Sardinella sardina (Poey). *Sardina de Ley.*

West Indian fauna, north to Key West.

Harengula sardina Poey, Memorias, II, 310, 1860, Cuba.

716. Sardinella macrophthalma (Ranzani).

West Indies; Cuba to Brazil.

Clupea macrophthalma Ranzani, Nov. Com. Ac. Sci. Bonon., V, 320, 1842, Brazil.

717. Sardinella thrissina (Jordan & Gilbert).

Gulf of California.

Clupea thrissina Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 353, Cape San Lucas, Lower California.

Harengula

Sardinella

Genus. Harengula

4

genus Lila

718. Sardinella humeralis (Cuvier & Valenciennes). *Sardina Escamuda; Whitebill; Pincers.*

West Indies and Gulf of Mexico; Pensacola and Cedar Keys southward.
Harengula humeralis Cuvier & Valenciennes, Hist. Nat. Poiss., xx, 293, 1847, Rio Janeiro, Bahia, Guadeloupe, and San Domingo.

Subgenus LILE Jordan & Evermann.

Lile Jordan & Evermann, Fishes North and Middle America, 431, 1896 (*stolifera*).

719. Sardinella stolifera (Jordan & Gilbert).

Gulf of California to Panama.
Clupea stolifera Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 339, Mazatlan.

Genus 212. OPISTHONEMA Gill. *Thread Herring.* Clupanodon

Opisthonema Gill, Proc. Ac. Nat. Sci. Phila. 1861, 37 (*thrissa*=*oglinum*).

720. Opisthonema oglinum (LeSueur). *Thread Herring; Machuelo; Sprat; Cailleu-Tassart.*

West Indian fauna, ranging regularly north to Florida and Carolina; Longport, New Jersey; Newport, Rhode Island; Fortress Monroe.
Megalops oglina, LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 359, Newport, Rhode Island.

721. Opisthonema libertatis (Günther).

Pacific Coast of Mexico and Central America.
Meletta libertatis Günther, Proc. Zool. Soc. Lond. 1866, 603, Libertad, Central America.

Genus 213. BREVOORTIA Gill. *The Menhadens.*

Brevoortia Gill, Proc. Ac. Nat. Sci. Phila. 1861, 37 (*menhaden*=*tyrannus*).

722. Brevoortia tyrannus (Latrobe). *Menhaden; Mossbunker; Bony-fish; Whitefish; Bug-fish; Fatback; Yellow-tail; Pogy.*

Nova Scotia to Brazil.
Clupea tyrannus Latrobe, Trans. Amer. Phil. Soc. Phila., v, 1802, 77, pl. 1, Chesapeake Bay.

722a. Brevoortia tyrannus aurea (Agassiz).

Coast of Brazil.
Clupanodon aureus Agassiz, Spix, Pisc. Brasil., 52, 1828, Brazil.

722b. Brevoortia tyrannus brevicaudata Goode.

Noank, Connecticut, and south.
Brevoortia tyrannus brevicaudata Goode, Proc. U. S. Nat. Mus. 1878, 34, Noank, Connecticut.

722c. Brevoortia tyrannus patronus Goode. *Gulf Menhaden.*

Gulf of Mexico.
Brevoortia patronus Goode, Proc. U. S. Nat. Mus., I, 1878, 39, Brazos Santiago, Texas.

Genus 214. CHIROCENTRODON Günther.

Chirocentrodon Günther, Cat., VII, 463, 1868 (*tæniatus*).

723. Chirocentrodon tæniatus Günther.

Jamaica.
Chirocentrodon tæniatus Günther, Cat., VII, 463, 1868, Jamaica.

Genus 215. ILISHA Gray.

Ilisha Gray, in Richardson, Ichthyol. Chin., in Proc. Brit. Assoc. 1845 (1846), 306 (*abnormis*).

724. Ilisha flavipinnis (Valenciennes).

Coast of Surinam and Brazil.
Pristigaster flavipinnis Valenciennes, in D'Orbigny, Voy. Amer. Mér., Poiss., pl. 10, fig. 2, 1839, Buenos Ayres.

725. Ilisha bleekeriana (Poey).
Matanzas, Cuba.
Pellona bleekeriana Poey, Repertorio, II, 242, 1867, Matanzas, Cuba.

726. Ilisha furthii (Steindachner).
Panama.
Pellona fürthii Steindachner, Ichth. Beitr., I, 14, 1874, Panama.

Genus 216. OPISTHOPTERUS Gill.
Opisthopterus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 31 (*tartoor*).

727. Opisthopterus lutipinnis (Jordan & Gilbert).
Pacific Coast of Mexico.
Pristigaster lutipinnis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 340, Mazatlan, Mexico.

728. Opisthopterus dovii (Günther).
Panama.
Pristigaster dovii Günther, Cat., VII, 461, 1868, Panama.

729. Opisthopterus macrops (Günther).
Panama.
Pristigaster macrops Günther, Proc. Zool. Soc. Lond. 1866, 603, and Cat., VII, 461, 1868, Panama.

Genus 217. ODONTOGNATHUS Lacépède.
Odontognathus Lacépède, Hist. Nat. Poiss., II, 221, 1790 (*mucronatus*).

730. Odontognathus mucronatum Lacépède.
Coast of Guiana.
Odontognathus mucronatus Lacépède, Hist. Nat. Poiss., 221, pl. 7, fig. 2, 1799, Cayenne.

731. Odontognathus panamense (Steindachner).
Panama.
Pristigaster (*Odontognathus*) *panamensis* Steindachner, Ichth. Beitr., V, 24, 1876, Panama.

Genus 218. PRISTIGASTER Cuvier.
Pristigaster Cuvier, Règne Anim., ed. I, 176, 1817 (*cayanus*).

732. Pristigaster cayanus Cuvier.
Coast of Guiana and northern Brazil.
Pristigaster cayanus Cuvier, Règne Anim., ed. I, pl. 10, fig. 3, 1817, Cayenne.

Family LXII. ENGRAULIDIDÆ. The Anchovies.

Genus 219. STOLEPHORUS Lacépède. *Silvery Anchovies.*
Stolephorus Lacépède, Hist. Nat. Poiss., V, 381, 1803 (*japonica*).

733. Stolephorus mizarchus Jordan & Gilbert.
Pacific Coast of America from Mazatlan to Panama.
Stolephorus mizarchus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 344, Mazatlan, Mexico.

734. Stolephorus perfasciatus (Poey). *Grubber Broadhead.*
Florida Keys to Cuba and Jamaica.
Engraulis perfasciatus Poey, Memorias, II, 313, 1860, Cuba.

735. Stolephorus exiguus Jordan & Gilbert.
Pacific Coast of Mexico at Mazatlan.
Stolephorus exiguus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 342, Mazatlan.

736. Stolephorus cubanus (Poey).
Cuba and Porto Rico.
Engraulis cubanus Poey, Synopsis, 420, 1868, Cuba.

Medipellona Eede

Elisha panamensis = same

E. fuodecim Cope, Proc. Am. Phil. Soc. 1927. 45

A. tapirulus Cope. Panama B. Peru.

A. cuyamus Fowler 1906. 85

Hacienda Rocha. Flo Cope

Anchovella Fowler 1911

perfoscalis = stolephorus = Euchoresolus Commerson

Anchovia scitula San Diego

A. lepidentostole Durvan

A. platyagyra Schultes

Stolephorus sebrialdi Jordan & Evers
Magellan.
Stolephorus naso Gilbert & Pearson Panama

S. gilberti is a Cetengraulis (Jordan)

S. germaine gr. 40 same

737. Stolephorus perthecatus Goode & Bean.

Pensacola, Florida.

Stolephorus perthecatus Goode & Bean, Proc. U. S. Nat. Mus. 1882, 434, Pensacola, Florida.

738. Stolephorus isohanus Jordan & Gilbert.

Pacific Coast of America from Mazatlan to Panama.

Stolephorus isohanus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 340, Mazatlan, Mexico.

739. Stolephorus brownii (Gmelin). *Striped Anchovy; Manjua; Anchovy Fry.*

Cape Cod to Brazil.

Atherina brownii Gmelin, Syst. Nat., 1397, 1788, Jamaica; after Brown.

740. Stolephorus cultratus Gilbert.

Santa Margarita Island, Lower California.

Stolephorus cultratus Gilbert, Proc. U. S. Nat. Mus. 1891, 544, Santa Margarita Island, Lower California.

741. Stolephorus delicatissimus (Girard).

San Diego Bay and southward on coast of Lower California.

Engraulis delicatissimus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 154, and Pac. R. R. Surv., x, 335, 1858, San Diego.

742. Stolephorus chœrostomus (Goode). *Hog-mouth Fry.*

Bermuda Islands; common in Hamilton Harbor.

Engraulis chœrostomus Goode, Am. Jour. Sci. Arts, August, 1874, 125, Bermudas.

743. Stolephorus argyrophanus (Cuvier & Valenciennes).

Gulf Stream; Woods Hole, Massachusetts.

Engraulis argyrophanus Cuvier & Valenciennes, Hist. Nat. Poiss., XXI, 49, 1848, equatorial Atlantic.

744. Stolephorus curtus Jordan & Gilbert.

Mazatlan, Mexico.

Stolephorus curtus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 343, Mazatlan, Mexico.

745. Stolephorus astilbe Jordan & Rutter.

West Indies.

Stolephorus astilbe Jordan & Rutter, Proc. Ac. Nat. Sci. Phila. 1896, Jamaica.

746. Stolephorus poeyi (Kner & Steindachner).

Rio Bayano, near Panama.

Engraulis poeyi Kner & Steindachner, Abh. Bayer Ak. Wiss., x, 1864, 23, with plate, Rio Bayano, near Panama.

747. Stolephorus robertsi Jordan & Rutter.

West Indies.

Stolephorus robertsi Jordan & Rutter, Proc. Ac. Nat. Sci. Phila. 1896, Jamaica.

748. Stolephorus opercularis Jordan & Gilbert.

Gulf of California to Panama.

Stolephorus opercularis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 275, Punta San Felipe, Gulf of California.

749. Stolephorus mitchilli (Cuvier & Valenciennes).

Cape Cod to Texas.

Engraulis mitchilli Cuvier & Valenciennes, Hist. Nat. Poiss., XXI, 50, 1848, New York; Carolina; Lake Pontchartrain, Louisiana.

750. Stolephorus lucidus Jordan & Gilbert. *"Sardina."*

Mazatlan, Mexico.

Stolephorus lucidus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 341, Mazatlan, Mexico.

751. Stolephorus clupeoides (Swainson).
Coast of Guiana and southward.
Engraulis? clupeoides Swainson, Nat. Hist. Fishes, II, 388, 1839, Pernambuco. Dutch Guiana.

752. Stolephorus compressus (Girard).
Point Conception to Lower California.
Engraulis compressus Girard, U. S. Pac. R. R. Surv., X, 336, 1858, San Diego. Cal.

753. Stolephorus panamensis (Steindachner).
Panama.
Engraulis panamensis Steindachner, Ichth. Beitr., IV, 39, 1875, Panama.

754. Stolephorus spinifer (Cuvier & Valenciennes).
Coast of Guiana; recorded from Panama by Steindachner.
Engraulis spinifer Cuvier & Valenciennes, Hist. Nat. Poiss., XXI, 39, 1848, Cayenne, French Guiana.

Genus 220. ENGRAULIS Cuvier. *Anchovies.*
Engraulis Cuvier, Règne Animal, ed. I, 174, 1817 (*encrasicholus*).

755. Engraulis mordax Girard. *California Anchovy.*
Pacific Coast of America from Vancouver Island to Lower California.
Engraulis mordax Girard, Proc. Ac. Nat. Sci. Phila. 1854, 138, and in Pac. R. R. Surv., X, 334, 1858, Shoalwater (now Willapa) Bay, Washington.

Genus 221. ANCHOVIA Jordan & Evermann.
Anchovia Jordan & Evermann, Fishes North and Middle America, 449, 1896 (*macrolepidota*).

756. Anchovia productus (Poey). *Hechudo; Grubber Broadhead.*
Cuba and Jamaica.
Engraulis productus Poey, Repertorio, 380, 1866, Cuba.

757. Anchovia macrolepidota (Kner & Steindachner). *Sardina Bocona.*
Gulf of Mexico to Panama.
Engraulis macrolepidotus Kner & Steindachner, Abhandl. Bayer Akad. Wiss., X, 1864, 21, pl. 3, fig. 2, Rio Bayano, Panama.

Genus 222. CETENGRAULIS Günther.
Cetengraulis Günther, Cat., VII, 383, 1868 (*edentulus*).

758. Cetengraulis mysticetus (Günther).
Panama.
Engraulis mysticetus Günther, Proc. Zool. Soc. Lond. 1866, 604, Panama.

759. Cetengraulis edentulus (Cuvier). *Bocon; Tarpong Fry.*
West Indies to Brazil; common in Cuba.
Engraulis edentulus Cuvier, Règne Animal, ed. II, vol. 2, 323, 1829, Jamaica; after Sloane.

Genus 223. PTERENGRAULIS Günther.
Pterengraulis Günther, Cat., VII, 398, 1868 (*atherinoides*).

760. Pterengraulis atherinoides (Linnæus).
Coasts of Guiana and Brazil.
Clupea atherinoides Linnæus, Syst. Nat., ed. XII, 523, 1766, Surinam.

Genus 224. LYCENGRAULIS Günther.
Lycengraulis Günther, Cat., VII, 399, 1868 (*grossidens*).

761. Lycengraulis grossidens (Cuvier).
Coasts of Guiana and Brazil.
Engraulis grossidens Cuvier, in Agassiz, Spix, Pisc. Brasil., 50, 1828, Rio Janeiro.

Genus Anchovia, valid.
may yell vahers-
species = [illegible] = [illegible]
? A. pallida Starks garmani. A. garmani [illegible]

A. natterera Steind [illegible]

Stenopantis engymen

Apogi Cuba ?
[illegible]

Encaîra

Bill & Jonnsend.
Benj Ben.

Family LXIII. ALEPOCEPHALIDÆ.

Genus 225. ALEPOCEPHALUS Risso.

Alepocephalus Risso, Mem. Ac. Nat. Sci. Turin, xxv, 270, 1820 (*rostratus*).

762. Alepocephalus productus Gill.

Gulf Stream.

Alepocephalus productus Gill, Proc. U. S. Nat. Mus. 1883, 256, Gulf Stream, at Albatross Station 2035, in 1,362 fathoms.

763. Alepocephalus agassizii Goode & Bean.

Gulf Stream.

Alepocephalus agassizii Goode & Bean, Bull. Mus. Comp. Zool., No. 5, vol. x, 215, 1882, Gulf Stream, at latitude 30°, in 922 fathoms.

764. Alepocephalus tenebrosus Gilbert.

Santa Barbara Channel, California.

Alepocephalus tenebrosus Gilbert, Proc. U. S. Nat. Mus. 1891, 545, Santa Barbara Channel, California, at Albatross Stations 2839, 2923, and others, in 359 to 822 fathoms.

Genus 226. MITCHILLINA Jordan & Evermann.

Mitchillina Jordan & Evermann, Fishes North and Middle America, 453, 1896 (*bairdii*).

765. Mitchillina bairdii (Goode & Bean).

Grand Banks of Newfoundland.

Alepocephalus bairdii Goode & Bean, Proc. U. S. Nat. Mus. 1879, 55, Grand Banks of Newfoundland.

Genus 227. BATHYTROCTES Günther.

Bathytroctes Günther, Ann. Mag. Nat. Hist. 1878, 249 (*microlepis*).

766. Bathytroctes stomias Gilbert.

Coast of Oregon.

Bathytroctes stomias Gilbert, Proc. U. S. Nat. Mus. 1890, 53, coast of Oregon, at Albatross Station 3074, in 877 fathoms.

Genus 228. TALISMANIA Goode & Bean.

Talismania Goode & Bean, Oceanic Ichthyology, 41, 1896 (*homopterus*).

767. Talismania antillarum Goode & Bean.

Caribbean Sea.

Talismania antillarum Goode & Bean, Oceanic Ichthyology, 44, fig. 49, 1896, Albatross Station 2394, in Caribbean Sea, latitude 28° 38′ 30″ N., longitude 87° 2′ W., in 420 fathoms.

768. Talismania æquatoris Goode & Bean.

Coast of Ecuador.

Talismania æquatoris Goode & Bean, Oceanic Ichthyology, 44, fig. 50, 1896, Albatross Station 2793, latitude 1° 3′ N., longitude 80° 15′ W., off coast of Ecuador, in 741 fathoms.

Genus 229. CONOCARA Goode & Bean.

Conocara Goode & Bean, Oceanic Ichthyology, 39, 1896 (*macdonaldi*).

769. Conocara macdonaldi Goode & Bean.

Gulf of Mexico, 24° 36′ N., 84° 5′ W.; 24° 36′ N., 84° 5′ W.; 28° 47′ 30″ N., 87° 27′ W.

Conocara macdonaldi Goode & Bean, Oceanic Ichthyology, 39, fig. 48, 1896, Gulf of Mexico.

770. Conocara macroptera (Vaillant).

Morocco to Soudan, Banc d'Arguin, and the Canaries; latitude 16° 57′ N., longitude 63° 12′ W.

Alepocephalus macropterus Vaillant, Expéd. Sci. Travailleur et Talisman, Poissons, 150, pl. 11, figs. 2*a*, 2*b*, 2*c*, 1888, coast of Morocco, Soudan, and Canaries.

Genus 230. PLATYTROCTES Günther.

Platytroctes Günther, Ann. Mag. Nat. Hist., II, 1878, 249 (*apus*).

771. Platytroctes apus Günther.

Mid-Atlantic and the Arabian Sea.

Platytroctes apus Günther, Ann. Mag. Nat. Hist., II, 1878, 249, mid-Atlantic.

Genus 231. ALEPOSOMUS Gill.

Aleposomus Gill, Am. Nat., XVIII, 1884, 433 (*copei*).

772. Aleposomus copei Gill.

Gulf Stream.

Aleposomus copei Gill, Am. Nat., XVIII, 1884, 433, Gulf Stream, latitude 37° 12′ 20″ N., longitude 69° 39′ W.

Family LXIV. SALMONIDÆ. The Salmon Family.

Genus 232. COREGONUS (Artedi) Linnæus. *Whitefishes.*

Coregonus (Artedi) Linnæus, Syst. Nat., ed. X, 310, 1758 (*lavaretus*).

Subgenus PROSOPIUM Milner.

Prosopium Milner, in Jordan, Man. Vert., ed. 2, 361, 1878 (*quadrilateralis*).

773. Coregonus coulterii Eigenmann & Eigenmann.

Headwaters of Columbia River in British Columbia.

Coregonus coulterii Eigenmann & Eigenmann, Am. Nat., November, 1892, 961, Kicking Horse River, at Field, British Columbia.

774. Coregonus williamsoni Girard. *Rocky Mountain Whitefish; Williamson's Whitefish; "Mountain Herring."*

Rocky Mountains to the Pacific, especially in the Columbia Basin and the headwaters of the Colorado; Chief Mountain Lake at the head of the Saskatchewan in Montana.

Coregonus williamsoni Girard, Proc. Ac. Nat. Sci. Phila. 1856, 136, Des Chutes River, Oregon.

774a. Coregonus williamsoni cismontanus Jordan.

Madison and Yellowstone rivers and other tributaries of the upper Missouri.

Coregonus williamsoni cismontanus Jordan, Bull. U. S. Fish Com., IX, 1889, 49, pl. 9, figs. 8 and 9, Horsethief Creek, a tributary of Madison River, Montana.

775. Coregonus kennicotti Milner. *Broad Whitefish; Muksun of the Russians.*

Great Bear Lake; Mackenzie and Yukon rivers.

Coregonus kennicotti Milner, in Jordan & Gilbert, Synopsis, 298, 1883, Fort Good Hope, British America.

776. Coregonus richardsonii Günther.

Arctic North America.

Coregonus richardsonii Günther, Cat., VI, 185, 1866, Arctic North America; exact locality unknown.

777. Coregonus quadrilateralis Richardson. *Pilot-fish; Menominee Whitefish; Shadwaiter; Round Whitefish.*

Lakes of New Hampshire, upper Great Lakes, northwestward to Alaska, as far south as Yukon River.

Coregonus quadrilateralis Richardson, Franklin's Jour. 1823, 714, Fort Enterprise, British America.

Subgenus COREGONUS (Artedi) Linnæus.

778. Coregonus clupeiformis (Mitchill). *Common Whitefish.*

Great Lakes and neighboring waters

Salmo clupeiformis Mitchill, Am. Month. Mag., II, 1818, 321, Sault Ste. Marie.

779. Coregonus nelsonii Bean. *Humpback Whitefish.*

Alaska, from Bristol Bay northward.

Coregonus nelsonii Bean, Proc. U. S. Nat. Mus. 1884, 48, Nulato, Alaska.

Sincerely yours
Mrs. Hubbs

Sincerely yours
Mrs. Hubbs

780. Coregonus labradoricus Richardson. *Labrador Whitefish; Sault Whitefish; Shadwaiter; Musquaw River Whitefish; Whiting of Lake Winnipiseogee.*

Great Lakes region to the lakes of the Adirondacks and White Mountains, and northwest to Winnipeg.

Coregonus labradoricus Richardson, Fauna Bor.-Amer., III, 206, 1836, Musquaw River, Labrador.

Genus 233. ARGYROSOMUS Agassiz. *The Lake Herrings.*

Argyrosomus Agassiz, Lake Superior, 339, 1850 (*clupeiformis=artedi*).

Subgenus ARGYROSOMUS Agassiz.

781. Argyrosomus osmeriformis (H. M. Smith). *Smelt of the New York lakes.*

Lakes of central New York; known from Seneca and Skaneateles lakes.

Coregonus osmeriformis Hugh M. Smith, Bull. U. S. Fish Com., XIV, 1894, pl. 1, 2, Seneca Lake; Skaneateles Lake.

782. Argyrosomus artedi (LeSueur). *Cisco; Lake Herring; Michigan Herring.*

Great Lakes and neighboring waters, and northward into Labrador.

Coregonus artedi LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1818, 231, Lake Erie; Niagara River.

782a. Argyrosomus artedi cisco Jordan.

Small lakes of Wisconsin and northern Indiana.

Argyrosomus cisco Jordan, Am. Nat. 1875, 136, Lake Tippecanoe, Warsaw, Ind.

783. Argyrosomus hoyi Gill. *Moon-eye Cisco; Cisco of Lake Michigan; Kieye of Lake Michigan.*

Deep waters of Lake Michigan.

Argyrosomus hoyi Gill, in Jordan, Am. Nat., March, 1875, 135, Lake Michigan, near Racine, Wisconsin.

784. Argyrosomus pusillus (Bean).

Yukon River to Bering Sea and northward.

Coregonus pusillus Bean, Proc. U. S. Nat. Mus. 1888, 526, Kuwuk River, Alaska.

785. Argyrosomus lucidus (Richardson). *Great Bear Lake Herring.*

Mackenzie River and tributaries; Great Bear Lake River.

Salmo (*Coregonus*) *lucidus* Richardson, Fauna Bor.-Amer., III, 207, 1836, with good figure, Great Bear Lake.

786. Argyrosomus laurettæ (Bean).

Alaska, from Yukon River northward to Point Barrow.

Coregonus laurettæ Bean, Proc. U. S. Nat. Mus. 1881, 156, Point Barrow, Alaska.

787. Argyrosomus prognathus (H. M. Smith). *Long-jaw; Bloater.*

Lake Ontario, Lake Michigan, Lake Superior, and doubtless the entire Great Lake basin.

Coregonus prognathus Hugh M. Smith, Bull. U. S. Fish Com., XIV, 1894, 4, pl. 1, fig. 3, Lake Ontario, at Wilson, N. Y.

788. Argyrosomus nigripinnis Gill. *Blue-fin; Black-fin.*

Deep waters of Lake Michigan and small lakes of Wisconsin and Minnesota.

Argyrosomus nigripinnis Gill, in Milner, Rept. U. S. Fish. Com. 1872–73 (1874), 87, Lake Michigan, off Racine, Wisconsin.

Subgenus ALLOSOMUS Jordan.

Allosomus Jordan, Man. Vert., ed. 2, 361, 1878 (*tullibee*).

789. Argyrosomus tullibee (Richardson). *Tullibee; Mongrel Whitefish.*

Great Lakes, Lake of the Woods, and northward.

Salmo (*Coregonus*) *tullibee* Richardson, Fauna Bor.-Amer., III, 201, 1836, Cumberland House, Pine Island Lake.

789a. Argyrosomus tullibee bisselli (Bollman).

Rawson Lake and Howard Lake, Michigan.

Coregonus tullibee bisselli Bollman, Rept. U. S. Fish Com., VIII, 1888, 223, Rawson and Howard lakes, Michigan.

Genus 234. STENODUS Richardson. *Inconnu.*

Stenodus Richardson, Back's Narrative Arctic Land Expedition, 521, 1836 (*mackenzii*).

790. Stenodus mackenzii (Richardson). *Inconnu.*

Delta of Mackenzie River.

Salmo mackenzii Richardson, Franklin's Jour. 1823, 707, Mackenzie River.

Genus 235. ONCORHYNCHUS Suckley. *The Pacific Salmons.*

Oncorhynchus Suckley, Ann. Lyc. Nat. Hist. N.Y. 1861, 312 (*scouleri=gorbuscha*).

Subgenus ONCORHYNCHUS Suckley.

791. Oncorhynchus gorbuscha (Walbaum). *Humpback Salmon; Haddo; Holia; Gorbuscha; Dog Salmon of Alaska.*

Pacific Coast and rivers of North America and Asia from Oregon northward.

Salmo gorbuscha Walbaum, Artedi Pisc., 69, 1792, Kamchatka; after the *Gorbuscha* of Pennant and Krasheninnikof.

792. Oncorhynchus keta (Walbaum). *Dog Salmon; Hay-ko; Le Kai Salmon.*

San Francisco to Kamchatka; abundant in Bering Straits.

Salmo keta vel *Kayko* Walbaum, Artedi Pisc., 72, 1792, rivers of Kamchatka; after the *Keta* or *Kayko* of Pennant and Krasheninnikof.

793. Oncorhynchus tschawytscha (Walbaum). *Quinnat Salmon; Chinook Salmon; Tscharitche; King Salmon; Columbia Salmon; Sacramento Salmon; Tyee Salmon; Saw-kwey; Chouicha* or *Tschawytscha.*

Alaska, Oregon, and California, southward to Ventura River and to northern China.

Salmo tschawytscha Walbaum, Artedi Pisc., 71, 1792, rivers of Kamchatka; after the *Tschawytscha* of Krasheninnikof, Hist. Kamchatka, 178, 1764, and the *Tschawytscha* of Pennant, 1792.

794. Oncorhynchus kisutch (Walbaum). *Silver Salmon; Kisutch; Skowitz; Hoopid Salmon; Coho Salmon; Bielaya Ryba; Quisutsch.*

From San Francisco northward, especially in Puget Sound and the Alaskan fjords; south on the Asiatic coast to Japan.

Salmo kisutch Walbaum, Artedi Pisc., 70, 1792, rivers and lakes of Kamchatka; after the *Kisutch* of Pennant.

Subgenus HYPSIFARIO Gill.

Hypsifario Gill, Proc. Ac. Nat. Sci. Phila. 1862, 330 (*kennerlyi = nerka*).

795. Oncorhynchus nerka (Walbaum). *Blueback Salmon; Redfish; Fraser River Salmon; Saw-qui, Sockeye,* or *Sauk-eye Salmon; Krasnaya Ryba.*

Klamath River and Rogue River to northern Alaska, Kamchatka, and Japan.

Salmo nerka Walbaum, Artedi, Pisc., 71, 1792, rivers and seas of Kamchatka; after the *Nerka* of Pennant, the *Narka* of Krasheninnikof.

Genus 236. SALMO (Artedi) Linnæus. *Salmons and Trouts.*

Salmo (Artedi, Gen. Piscium) Linnæus, Syst. Nat., ed. x, 308, 1758 (*salar*, etc.).

Subgenus SALMO (Artedi) Linnæus.

796. Salmo salar Linnæus. *Common Atlantic Salmon.*

North Atlantic, ascending all suitable rivers in northern Europe and region north of Cape Cod to Hudson Bay; formerly abundant in the Hudson and occasional in the Delaware, its northern limit in the Churchill, Albany, and Moose rivers, flowing into Hudson Bay.

Salmo salar Linnæus, Syst. Nat., ed. x, 308, 1758, seas of Europe.

796a. Salmo salar sebago Girard. *Landlocked Salmon.*

Lakes of Maine, New Hampshire, and New Brunswick.

Salmo sebago Girard, Proc. Ac. Nat. Sci. Phila. 1853, 380, Sebago Pond, N. H.

796b. Salmo salar ouananiche McCarthy. *Ouananiche; Wannanishe; Winninish.*

Lake St. John, Saguenay River, and northward.

Salmo salar ouananiche Eugene McCarthy, in Jordan & Evermann, Fishes North and Middle America, 487, 1896, Saguenay River, Canada.

Mytilus. Rivers of Kamtschatka. only.

Salmo clarkii. American form.
not found above Kadiak.

Subgenus TRUTTA Linnæus.

Truttæ Linnæus, Syst. Nat., ed. x, 308, 1758 (*trutta*, etc.: "*Truttæ corpore variegato*").

797. Salmo mykiss Walbaum. *Cut-throat Trout; Mykiss.* River of Kamchatka

Lower Columbia to British America, Alaska, and Kamchatka.

Salmo mykiss Walbaum, Artedi Pisc., 59, 1792, Kamchatka; based on *Mykiss* of Pennant.

797a. Salmo mykiss clarkii (Richardson). *Columbia River Trout.*

Puget Sound to Elk River, Humboldt County, California.

Salmo clarkii Richardson, Fauna Bor.-Amer., III, 225, 1836, Cathlapootl River.

797b. Salmo mykiss lewisi (Girard). *Yellowstone Trout; Cut-throat Trout.*

Snake River basin above the Shoshone Falls, through Two-Ocean Pass to the headwaters of the Yellowstone and other affluents of the upper Missouri; Yellowstone Lake.

Salar lewisi Girard, Proc. Ac. Nat. Sci. Phila. 1856, 219, Falls of Missouri River.

797c. Salmo mykiss gibbsii (Suckley).

Middle Columbia River basin.

Salmo gibbsii Suckley, Ann. Lyc. Nat. Hist. N.Y., VII, 1858, 1, Fort Dalles, Oregon.

797d. Salmo mykiss henshawi (Gill & Jordan). *Lake Tahoe Trout; Silver Trout; Truckee Trout.*

Basin of the post-Tertiary Lake Lahontan; Lake Tahoe, Pyramid Lake, Webber Lake, Donner Lake, Independence Lake, Truckee River, Humboldt River, Carson River, and most streams of the eastern slope of the Sierra Nevada; also the headwaters of Feather River, west of the Sierra Nevada, probably introduced from Nevada.

Salmo henshawi Gill & Jordan, in Jordan, Man. Vert., ed. 2, 358, 1878, Lake Tahoe.

797e. Salmo mykiss virginalis (Girard). *Trout of Utah Lake.*

Lakes and streams west of the Wasatch range, especially in Bear, Provo, Jordan, and Sevier rivers, and in Utah Lake.

Salar virginalis Girard, Proc. Ac. Nat. Sci. Phila. 1856, 220, Utah Lake.

797f. Salmo mykiss spilurus (Cope). *Rio Grande Trout.*

Upper Rio Grande and southward into the mountains of Chihuahua.

Salmo spilurus Cope, Hayden's Geol. Surv. Mont. for 1871 (1872), 470, Sangre de Cristo Pass, Colorado.

797g. Salmo mykiss pleuriticus (Cope). *Colorado River Trout.*

Colorado River basin.

Salmo pleuriticus Cope, Hayden's Geol. Surv. Mont. for 1871 (1872), 471, headwaters of Green River, Wyoming.

797h. Salmo mykiss bouvieri (Bendire). *Waha Lake Trout.*

Waha Lake, Washington.

Salmo purpuratus bouvieri Bendire, in Jordan & Gilbert, Synopsis, 315, 1883, Waha Lake, Washington.

797i. Salmo mykiss stomias (Cope). *Greenback Trout.*

Headwaters of Arkansas and Platte rivers.

Salmo stomias Cope, Hayden's Geol. Surv. Wyo. for 1870 (1871), 433, South Platte River, locality unknown.

797j. Salmo mykiss macdonaldi Jordan & Evermann. *Yellow-fin Trout.*

Twin Lakes, tributary to the Arkansas River, near Leadville, Colorado.

Salmo mykiss macdonaldi Jordan & Evermann, Proc. U. S. Nat. Mus. 1889 (1890), 453, Twin Lakes, Colorado.

798. Salmo gairdneri Richardson. *Steelhead; Hardhead; "Salmon Trout."*

Coastwise streams from Santa Ynez Mountains, San ta Barbara County, northward to British Columbia, west of the Sierra Nevada and Cascade Range; especially abundant in the lower Columbia, ascending Snake River as far as Auger Falls and headwaters of Salmon River, Idaho.

Salmo gairdneri Richardson, Fauna Bor.-Amer., III, 221, 1836, Columbia River at Fort Va[illegible] Washington.

798a. Salmo gairdneri kamloops (Jordan). *Kamloops Trout; Stit-tse.*

Kamloops Lake, Okanogan Lake, Kootenai Lake, and other lakes tributary to Fraser River or to the upper Columbia.

Oncorhynchus kamloops Jordan, Forest and Stream, XXXIX, No. 19, November 10, 1892, 405, Kamloops Lake, British Columbia.

798b. Salmo gairdneri crescentis Jordan & Beardslee. *Speckled Trout of Crescent Lake.*

Crescent Lake, Clallam County, Washington.

Salmo gairdneri crescentis Jordan & Beardslee, Proc. Cal. Ac. Sci. 1896, 207, pl. 22, Crescent Lake, Clallam County, Washington.

798c. Salmo gairdneri beardsleei Jordan & Seale. *Blueback Trout of Crescent Lake.*

Crescent Lake, Clallam County, Washington.

Salmo gairdneri beardsleei Jordan & Seale, Proc. Cal. Ac. Sci. 1896, 209, pl. 23, Crescent Lake, Clallam County, Washington.

799. Salmo irideus Gibbons. *Rainbow Trout; Coast Range Trout.*

Mountain streams from the coast of Washington southward to San Diego County, California.

Salmo irideus Gibbons, Proc. Cal. Ac. Nat. Sci. 1855, 36, San Leandro Creek, Alameda County, California.

799a. Salmo irideus masoni (Suckley). *Brook Trout of western Oregon.*

Puget Sound to southern Oregon, in streams of the Coast Range.

Salmo masoni Suckley, Pac. R. R. Surv., XII, part 2, 345, 1860, Cathlapootl River.

799b. Salmo irideus shasta (Jordan). *McCloud River Rainbow Trout.*

Streams of the Sierra Nevada from Mount Shasta southward; known from McCloud River, the limits of its range not well known. Introduced into the Truckee River and many eastern streams.

Salmo gairdneri shasta Jordan, 13th Bien. Rept. Fish Com. California, 1894, 142, with plate, McCloud River at Baird, Shasta County, California.

799c. Salmo irideus gilberti (Jordan). *Kern River Trout.*

Kern River, California.

Salmo gairdneri gilberti Jordan, 13th Bien. Rept. Fish Com. California, 1894, 143, with plate, South Fork of Kern River at Soda Springs, California.

799d. Salmo irideus stonei (Jordan). *Nissuee Trout; No-shee Trout.*

McCloud River and upper Sacramento River.

Salmo gairdneri stonei Jordan, 13th Bien. Rept. Fish Com. California, 1894, 142, with plate, McCloud River at Baird, California.

799e. Salmo irideus aqua-bonita (Jordan). *Golden Trout of Mount Whitney.*

Mountain streams on the west side of Mount Whitney, tributary to Kern River, Volcano Creek, and South Fork of Kern River; also Owens Lake.

Salmo mykiss aqua-bonita Jordan, Proc. U. S. Nat. Mus. 1892, 481, Volcano or Whitney Creek, California.

Genus 237. **CRISTIVOMER** Gill & Jordan. *Great Lakes Trout.*

Cristivomer Gill & Jordan, in Jordan, Man. Vert. E. U. S., ed. 2, 356, 1878 (*namaycush*).

800. Cristivomer namaycush (Walbaum). *Great Lakes Trout; Mackinaw Trout, Longe* (Vermont); *Togue* (Maine); *Namaycush; Masamacush.*

Great Lakes region and lakes of northern New York, New Hampshire, and Maine, headwaters of Columbia and Fraser rivers, streams of Vancouver Island, and north to the Arctic Circle.

Salmo namaycush Walbaum, Artedi Pisc., 68, 1792, Hudson Bay; based on the *Namaycush salmon* of Pennant.

800a. Cristivomer namaycush siscowet (Agassiz). *Siscowet.*

Lake Superior.

Salmo siscowet Agassiz, Lake Superior, 333, 1850, Lake Superior.

Hucho { hucho Danube
taimen Siberia
perryi Japan.

Salvelinus kundscha Pallas.
Rivers & shores of Kamchatka,

var
Salv. malma partim.
Columbia & Sacramento
Hea. Cooper.

Genus 238. SALVELINUS (Nilsson). *Charrs.*

Salvelius Nilsson, Prodr. Scand., 7, 1832 (*alpinus*).

801. Salvelinus fontinalis (Mitchill). *Brook Trout; Speckled Trout.*

Maine to the Saskatchewan and northward to Labrador, southward in the Alleghanies to headwaters of the Savannah, Chattahoochee, Catawba, and French Broad rivers.

Salmo fontinalis Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 435, near New York City.

801a. Salvelinus fontinalis agassizii (Garman). *Dublin Pond Trout.*

New Hampshire.

Salmo agassizii Garman, 19th Rept. Mass. Fish Com. 1885, 20, Dublin Pond (Lake Monadnock), Keene, N. H.; Center Pond, New Hampshire.

802. Salvelinus malma (Walbaum). *Dolly Varden Trout; Oregon Charr; Bull Trout; Red-spotted Trout; Malma; Golet.*

Streams west of the Cascade Range, from the upper Sacramento to Montana, Alaska, and Kamchatka; in the Columbia basin as far up as Montana and Idaho. Kamchatka

Salmo malma Walbaum, Artedi Pisc., 66, 1792, ~~Bering Sea~~; based on *Malma* of Pennant. Lake of Stanovoi Kova on Kamchatka.

803. Salvelinus alpinus (Linnæus). *European Charr; Sälbling; Saibling; Ombre Chevalier; Greenland Charr.*

Central and northern Europe and northeastern America.

Salmo alpinus Linnæus, Syst. Nat., ed. x, 309, 1758, Lapland, West Gothland, etc.

803a. Salvelinus alpinus alipes (Richardson). *Long-finned Charr.*

Lakes of Greenland and Boothia Felix.

Salmo alipes Richardson, Nat. Hist. App. Ross's Voy., LVII, and Fauna Bor.-Amer., III, 169, 1836, lakes about Regent Inlet; Boothia Felix.

803b. Salvelinus alpinus stagnalis (Fabricius). *Greenland Charr.*

Waters of Greenland, Boothia, and neighboring regions.

Salmo stagnalis Fabricius, Fauna Grœnlandica, 175, 1780, alpine ponds of Greenland; not migratory.

803c. Salvelinus alpinus arcturus (Günther).

Victoria Lake and Flœberg Beach, Arctic America, latitude 82° 34′.

Salmo arcturus Günther, Proc. Zool. Soc. Lond. 1877, 294, pl. 5, Victoria Lake and Flœberg Beach, Arctic America.

803d. Salvelinus alpinus aureolus (Bean). *Golden Trout of Sunapee Lake.*

Sunapee Lake, New Hampshire; Dan Hole Pond, Carroll County, New Hampshire, tributary to Saco River; and Floods Pond, Ellsworth, Maine, tributary to Union River.

Salvelinus aureolus Bean, Proc. U. S. Nat. Mus. 1887, 628, Sunapee Lake, New Hampshire.

804. Salvelinus oquassa (Girard). *Oquassa Trout; Blueback Trout; Quasky.*

Rangeley Lakes, western Maine.

Salmo oquassa Girard, Proc. Ac. Nat. Sci. Phila. 1854, 262, Oquassa Lake, Maine.

804a. Salvelinus oquassa naresi (Günther).

Lakes of Arctic America, Discovery Bay, and Cumberland Gulf.

Salmo naresi Günther, Proc. Zool. Soc. Lond. 1877, 476, plate, fresh-water lakes near Discovery Bay.

804b. Salvelinus oquassa marstoni (Garman). *Lac de Marbre Trout.*

Lac de Marbre, Ottawa County, Province of Quebec, Canada.

Salmo marstoni Garman, Science, July 14, 1893, 23, Lac de Marbre, Ottawa County, Quebec.

Family LXV. THYMALLIDÆ. The Graylings.

Genus 239. THYMALLUS Cuvier.

Thymallus Cuvier, Règne Anim., ed. 2, II, 306, 1829 (*thymallus*), (not *Thymalus* Latreille, 1802, a genus of *Coleoptera*).

805. Thymallus signifer (Richardson). *Arctic Grayling; Poisson Bleu.*

Mackenzie River to Alaska and the Arctic Ocean.

Coregonus signifer Richardson, Franklin's Jour. 1823, 711, Winter Lake near Fort Enterprise, British America.

806. Thymallus ontariensis Cuvier & Valenciennes. *Michigan Grayling.*

Streams of northern Michigan; formerly abundant in Au Sable River, Jordan River, and other streams in the southern peninsula; Otter Creek, near Keweenaw, in the northern peninsula.

Thymallus ontariensis Cuvier & Valenciennes, Hist. Nat. Poiss., XXI, 452, 1848, said to have been brought by Milbert from Lake Ontario.

806a. Thymallus ontariensis montanus Milner. *Montana Grayling.*

Madison and Gallatin rivers, Montana.

Thymallus montanus Milner, Rept. U. S. Fish Com. 1872–73 (1874), 741, tributary of Missouri River at Camp Baker, Montana.

Family LXVI. ARGENTINIDÆ. The Smelts.

Genus 240. MALLOTUS Cuvier. *Capelins.*

Mallotus Cuvier, Règne Anim., ed. 2, II, 305, 1829 (*villosa*).

807. Mallotus villosus (Müller). *Capelin; Lodde.*

Arctic America, south to Cape Cod and Alaska; Kamchatka.

Clupea villosa Müller, Prodr. Zool. Dan., 245, 1777, Greenland.

Genus 241. THALEICHTHYS Girard. *Eulachon.*

Thaleichthys Girard, U. S. Pac. R. R. Surv., Fishes, 325, 1858 (*stevensi* = *pacificus*).

808. Thaleichthys pacificus (Richardson). *Eulachon; Candle-fish; Oolachan.*

Oregon to Alaska.

Salmo (*Mallotus*) *pacificus* Richardson, Fauna Bor.-Amer., III, 226, 1836, Columbia River.

Genus 242. OSMERUS (Artedi) Linnæus.

Osmerus (Artedi) Linnæus, Syst. Nat., ed. X, 310, 1758 (*eperlanus*).

Subgenus SPIRINCHUS Jordan & Evermann.

Spirinchus Jordan & Evermann, Fishes North and Middle America, 522, 1896 (*thaleichthys*).

809. Osmerus thaleichthys Ayres.

Pacific Coast from San Francisco northward to Bristol Bay in Alaska.

Osmerus thaleichthys Ayres, Proc. Cal. Ac. Sci. 1860, 62, San Francisco.

810. Osmerus attenuatus Lockington.

California from San Francisco northward.

Osmerus attenuatus Lockington, Proc. U. S. Nat. Mus. 1880, 66, San Francisco.

Subgenus OSMERUS (Artedi) Linnæus.

811. Osmerus mordax (Mitchill). *American Smelt; Ice-fish.*

Atlantic Coast of United States from Virginia northward to Gulf of St. Lawrence; Lakes Champlain and Memphremagog.

Atherina mordax Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 446, New York.

811a. Osmerus mordax spectrum (Cope). *Wilton Smelt.*

Landlocked in Wilton Pond, Kennebec County, Maine.

Osmerus spectrum Cope, Proc. Am. Phil. Soc. Phila. 1870, 490, Wilton Pond, Kennebec County, Maine.

Salmothymus Berg for Brachymystax
Thymallodes subg. arctica, includes ours.
obtusirostris

Phylogephyra brevirostris or altaica
1907.

very doubtful.

Osmerus albatrossis.
Karluk.

new genus?

Thrombonus

811b. Osmerus mordax abbotti (Cope). *Cobessicontic Smelt.*
Landlocked in Cobessicontic Lake, Kennebec County, Maine.
Osmerus abbotti Cope, Proc. Am. Phil. Soc. Phila. 1870, 490, Cobessicontic Lake, Maine.

812. Osmerus dentex Steindachner. *Rainbow Herring.*
Coast of Alaska and south on the Pacific Coast to northern China.
Osmerus dentex Steindachner, Sitzungsb. Kais. Akad. Wiss. Wien, LXI, 1870, 429, northern China.

Genus 243. HYPOMESUS Gill. *Surf Smelts.*
Hypomesus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 168 (*pretiosa*).

813. Hypomesus pretiosus (Girard). *Surf Smelt.*
Coast of California and Oregon, from Monterey northward.
Argentina pretiosa Girard, Proc. Ac. Nat. Sci. Phila. 1854, 155, San Francisco.

814. Hypomesus olidus (Pallas). *Pond Smelt.*
Alaska and Kamchatka.
Salmo (*Osmerus*) *olidus* Pallas, Zoogr. Rosso-Asiat., III, 391, 1811, lakes and rivers of Kamchatka.

Genus 244. ARGENTINA (Artedi) Linnæus. *Argentines.*
Argentina (Artedi) Linnæus, Syst. Nat., ed. x, 315, 1758 (*sphyræna*).

815. Argentina silus Ascanius.
Northern Europe; occasionally taken on the Grand Banks and off the coast of Maine.
Argentina silus Ascanius, Icon. Rev. Nat., pl. 3, 3, 24, 1763, Norway.

816. Argentina sialis Gilbert. new genus ?
Coast of California.
Argentina sialis Gilbert, Proc. U. S. Nat. Mus. 1890, 56, coast of California at Albatross Station 3017, in 58 fathoms.

817. Argentina striata Goode & Bean.
Gulf of Mexico.
Argentina striata Goode & Bean, Oceanic Ichthyology, 52, fig. 62, 1896, Gulf of Mexico, in latitude 28° 36′ N., longitude 85° 33′ 30″ W.

Genus 245. LEUROGLOSSUS Gilbert.
Leuroglossus Gilbert, Proc. U. S. Nat. Mus. 1890, 57 (*stilbius*).

818. Leuroglossus stilbius Gilbert.
Coast of California.
Leuroglossus stilbius Gilbert, Proc. U. S. Nat. Mus. 1890, 57, Coast of California at Albatross Stations 2997 and 2998, in 221 and 40 fathoms.

Family LXVII. MICROSTOMIDÆ.

Genus 246. NANSENIA Jordan & Evermann.
Nansenia Jordan & Evermann, Fishes North and Middle America, 528, 1896 (*grœnlandica*).

819. Nansenia grœnlandica (Reinhardt).
Greenland.
Microstomus grœnlandicus Reinhardt, Vidensk. Selsk. Naturv. Math. Afhandl., VIII, 1841, LXXIV, Greenland.

Genus 247. BATHYLAGUS Günther.
Bathylagus Günther, Ann. Mag. Nat. Hist., II, 1878, 248 (*atlanticus*).

820. Bathylagus benedicti Goode & Bean.
Gulf Stream.
Bathylagus benedicti Goode & Bean, Oceanic Ichthyology, 55, fig. 64, 1896, Gulf Stream, at Albatross Stations 2094, 2711, and 2572.

821. Bathylagus euryops Goode & Bean.

Gulf Stream.

Bathylagus euryops Goode & Bean, Oceanic Ichthyology, 55, fig. 63, 1896. Gulf Stream, in about latitude 40° N., and longitude 70° W.

822. Bathylagus pacificus Gilbert.

Coast of Washington, in deep water.

Bathylagus pacificus Gilbert, Proc. U. S. Nat. Mus. 1890, 55, off Washington, at Albatross Stations 3071 and 3074, in 685 and 877 fathoms.

823. Bathylagus borealis Gilbert.

Coast of Alaska, in deep water.

Bathylagus borealis Gilbert, Proc. Rept. U. S. Fish Com. 1893 (1896), 492, north of Aleutian Island at Albatross Station 3027, in 322 fathoms.

Order T. INIOMI. The Lantern-Fishes.

Family LXVIII. SYNODONTIDÆ. The Lizard-Fishes.

Genus 248. TRACHINOCEPHALUS Gill.

Trachinocephalus Gill, Cat. Fish. East Coast N. Amer., 53, 1861 (*myops*).

824. Trachinocephalus myops (Forster). *Ground Spearing; Lagarto.*

Tropical parts of the western Atlantic, West Indies, and Brazil, and ranging on our Atlantic Coast to South Carolina.

Salmo myops Forster, in Bloch & Schneider, Syst. Ichth., 421, 1801, St. Helena.

Genus 249. SYNODUS (Gronow) Bloch & Schneider. *Lizard-fishes.*

Synodus (Gronow) Bloch & Schneider, Syst. Ichth., 396, 1801 (*synodus*).

825. Synodus intermedius (Agassiz). *Sand-diver.*

Coast of southern Florida to Brazil.

Saurus intermedius Agassiz, Spix, Misc. Brasil., 81, 1828, Brazil.

826. Synodus evermanni Jordan & Bollman.

Mazatlan to coast of Colombia.

Synodus evermanni Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 152, Pacific Ocean off coast of Colombia, at Albatross Stations 2795 and 2797, in 33 fathoms.

827 Synodus poeyi Jordan.

Cuba.

Synodus poeyi Jordan, Proc. U. S. Nat. Mus. 1886, 526, Havana, Cuba.

828. Synodus synodus (Linnæus).

Bahia, Brazil.

Esox synodus Linnæus, Syst. Nat., ed. XII, 516, 1766, America; based on *Synodus* of Gronow.

829. Synodus lacertinus Gilbert.

Acapulco, Mexico.

Synodus lacertinus Gilbert, Proc. U. S. Nat. Mus. 1890, 55, Acapulco, Mexico.

830. Synodus saurus (Linnæus). *Tiru; Tanutola; Lacerto.*

Coast of southern Europe and neighboring islands; Bermudas

Salmo saurus Linnæus, Syst. Nat., ed. XII, 511, 1766, Mediterranean; after Artedi.

831. Synodus scituliceps Jordan & Gilbert.

Pacific Coast of America from Cape San Lucas to Panama.

Synodus scituliceps Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 344, Mazatlan, Mexico.

Bathylagus ~~capitalis~~ Gilbert
mellei

Off San Diego

248
metroselid

Syndes dominicensis
Jordan 1911. San Domingo
S. dermatogenys
Hawaii

z S. Sotelieeps

832. Synodus jenkinsi Jordan & Bollman.

Gulf of California to Galapagos Islands.

Synodus jenkinsi Jordan & Bollman, Proc. U. S. Nat. Mus. 1889. 153, off coast of Colombia, Galapagos Islands, at Albatross Stations 2797 and 2802, in 33 and 16 fathoms.

833. Synodus fœtens (Linnæus). *Lizard-fish; Lagarto; Soap-fish.*

Cape Cod to Brazil; common from South Carolina southward.

Salmo fœtens Linnæus, Syst. Nat., ed. XII, 513, 1766, South Carolina.

834. Synodus lucioceps (Ayres).

Coast of California from San Francisco to Santa Barbara.

Saurus lucioceps Ayres, Proc. Cal. Ac. Sci. 1855, 66, San Francisco.

Genus 250. BATHYSAURUS Günther.

Bathysaurus Günther, Ann. Mag. Nat. Hist., August, 1878, 181 (*ferox*).

835. Bathysaurus ferox Günther.

Atlantic and South Pacific; known from off New Zealand, Morocco, and the Gulf Stream.

Bathysaurus ferox Günther, Ann. Mag. Nat. Hist. 1878, 182, east coast of New Zealand.

Genus 251. BATHYLACO Goode & Bean.

Bathylaco Goode & Bean, Oceanic Ichthyology, 57, 1896 (*nigricans*).

836. Bathylaco nigricans Goode & Bean.

Gulf of Mexico off Santa Cruz, in deep water.

Bathylaco nigricans Goode & Bean, Oceanic Ichthyology, 57, fig. 69, 1896, off Santa Cruz, Mexico, in 2,393 fathoms.

Family LXIX. AULOPIDÆ.

Genus 252. CHLOROPHTHALMUS Bonaparte.

Chlorophthalmus Bonaparte, Fauna Italica, fasci. XXVIII, Pesci, 1840 (*agassizii*).

837. Chlorophthalmus agassizii Bonaparte.

Atlantic and Mediterranean, rare about Naples and Sicily; eastern Atlantic, Azores, Sargasso Sea, and Cape Verde.

Chlorophthalmus agassizii Bonaparte, Fauna Italica, pl. 121, 1840, Italy.

838. Chlorophthalmus chalybeius (Goode).

Gulf Stream, in from 85 to 167 fathoms.

Hyphalonedrus chalybeius Goode, Proc. U. S. Nat. Mus., III, 1881, 484, Gulf Stream, off Rhode Island, at Fish Hawk Stations 876 and 878, in 120 and 142 fathoms.

839. Chlorophthalmus truculentus Goode & Bean.

Off Barbados.

Chlorophthalmus truculentus Goode & Bean, Oceanic Ichthyology, 61, fig. 72, 1896, off Barbados, in 158 fathoms.

Family LXX. BENTHOSAURIDÆ.

Genus 253. BENTHOSAURUS Goode & Bean.

Benthosaurus Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 165, 1886 (*grallator*).

840. Benthosaurus grallator Goode & Bean.

Gulf of Mexico and Gulf Stream, in latitude 24° 33′ N., longitude 84° 23′ W.; latitude 39° 3′ 15″ N., longitude 70° 50′ 45″ W.

Benthosaurus grallator Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 168, 1886, Gulf Stream.

Family LXXI. BATHYPTEROIDÆ.

Genus 254. BATHYPTEROIS Günther.

Bathypterois Günther, Ann. Mag. Nat. Hist., 5th series, II, 1878, 183 (*longifilis*).

Subgenus SYNAPTERETMUS Goode & Bean.

Synapteretmus Goode & Bean, Oceanic Ichthyology, 64, 1896 (*quadrifilis*).

841. Bathypterois quadrifilis Günther.

Brazil; St. Vincent.

Bathypterois quadrifilis Günther, Ann. Mag. Nat. Hist., II, 1878, 184, off coast of Brazil, in 500 to 770 fathoms.

842. Bathypterois longipes Günther.

East coast of South America.

Bathypterois longipes Günther, Ann. Mag. Nat. Hist., II, 1878, 184, east coast of South America, in 2,650 fathoms.

Family LXXII. IPNOPIDÆ.

Genus 255. IPNOPS Günther.

Ipnops Günther, Ann. Mag. Nat. Hist., II, 1878, 187 (*murrayi*).

843. Ipnops murrayi Günther.

Coast of Brazil, Tristan da Cunha, Celebes, and in tropical America (24° 36′ N., 84° W.), and off Bequia.

Ipnops murrayi Günther, Ann. Mag. Nat. Hist., II, 1878, 187, coast of Brazil, etc.

Family LXXIII. RONDELETIIDÆ.

Genus 256. RONDELETIA Goode & Bean.

Rondeletia Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 454 (*bicolor*), and in Oceanic Ichthyology, 68, 1896.

844. Rondeletia bicolor Goode & Bean.

Gulf Stream.

Rondeletia bicolor Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 454, pl. 17, fig. 7, and in Oceanic Ichthyology, 68, fig. 77, 1896, at Albatross Station 2724, in 1,641 fathoms.

Family LXXIV. CETOMIMIDÆ.

Genus 257. CETOMIMUS Goode & Bean.

Cetomimus Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 452 (*gillii*), and in Oceanic Ichthyology, 68, 1896.

845. Cetomimus gillii Goode & Bean.

Gulf Stream.

Cetomimus gillii Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 452, pl. 17, fig. 2, and in Oceanic Ichthyology, 69, fig. 78, 1896, Gulf Stream, in latitude 39° 35′ N., longitude 71° 24′ 30″ W.

846. Cetomimus storeri Goode & Bean.

Gulf Stream.

Cetomimus storeri Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 453, pl. 17, fig. 3, and in Oceanic Ichthyology, 69, fig. 79, 1896, Gulf Stream at Albatross Station 2222, in 1,535 fathoms.

Family LXXV. MYCTOPHIDÆ. The Lantern-Fishes.

Genus 258. MACROSTOMA Risso.

Macrostoma Risso, Europ. Mérid., III, 447, 1826 (*angustidens*); (not *Macrostomus* Wied, 1817, a genus of insects).

847. Macrostoma quercinum (Goode & Bean).

Western Atlantic and Mediterranean.

Notoscopelus quercinus Goode & Bean, Oceanic Ichthyology, 83, fig. 97, 1896, Grand Banks.

Macrodoma brachycephala Eig & Eig
Corlett Bucch.

848. Macrostoma margaritiferum (Goode & Bean).
Grand Banks of Newfoundland.
Notoscopelus margaritiferus Goode & Bean, Oceanic Ichthyology, 84, fig. 98, 1896, off Banquero.

849. Macrostoma angustidens Risso. *Prick-fish; Maire d'Amplora.*
Atlantic and Indian oceans, Norway and Greenland.
Macrostoma angustidens Risso, Europ. Mérid., III, 448, 1826, Nice.

850. Macrostoma castaneum (Goode & Bean).
Grand Banks.
Notoscopelus castaneus Goode & Bean, Oceanic Ichthyology, 84, fig. 95, 1896, Grand Banks.

851. Macrostoma caudispinosum (Johnson).
Atlantic Ocean.
Scopelus caudispinosus Johnson, Proc. Zool. Soc. Lond. 1863, 42, Madeira.

Genus 259. CERATOSCOPELUS Günther.
Ceratoscopelus Günther, Cat., V, 405 and 412, 1864 (*madeirensis*).

852. Ceratoscopelus madeirensis (Lowe).
Atlantic and Mediterranean; west to the Grand Banks.
Scopelus madeirensis Lowe, Proc. Zool. Soc. Lond. 1839, 87, Madeira.

Genus 260. LAMPANYCTUS Bonaparte.
Lampanyctus Bonaparte, Fauna Italica, fasc. XXVII, 1840 (*crocodilus*).

853. Lampanyctus crocodilus (Risso).
Atlantic and Mediterranean; west to 40° W., 33° N.
Gasteropelecus crocodilus Risso, Ichth. Nice, 357, 1810, Nice.

854. Lampanyctus townsendi (Eigenmann & Eigenmann).
Cortez Banks, near San Diego.
Myctophum townsendi Eigenmann & Eigenmann, West Am. Sci. 1889, 125, Cortez Banks, off San Diego, California.

855. Lampanyctus alatus Goode & Bean.
Gulf of Mexico.
Lampanyctus alatus Goode & Bean, Oceanic Ichthyology, 79, fig. 92, 1896, Gulf of Mexico, in latitude 28° 43′ N., longitude 87° 14′ W.

856. Lampanyctus guntheri Goode & Bean.
Grand Banks.
Lampanyctus guntheri Goode & Bean, Oceanic Ichthyology, 79, fig. 90, 1896, Grand Banks.

857. Lampanyctus gemmifer Goode & Bean.
Gulf Stream.
Lampanyctus gemmifer Goode & Bean, Oceanic Ichthyology, 80, fig. 88, 1896, Grand Banks, in latitude 39° 40′ N., longitude 71° 35′ W., in 538 fathoms.

858. Lampanyctus lacerta Goode & Bean.
Gulf of Mexico.
Lampanyctus lacerta Goode & Bean, Oceanic Ichthyology, 81, fig. 89, 1896, Gulf of Mexico, in latitude 28° 38′ 30″ N., longitude 85° 52′ 30″ W.

Genus 261. LAMPADENA Goode & Bean.
Lampadena Goode & Bean, Oceanic Ichthyology, 85, 1896 (*speculigera*).

859. Lampadena speculigera Goode & Bean.
Gulf Stream.
Lampadena speculigera Goode & Bean, Oceanic Ichthyology, 85, fig. 99, 1896, Gulf Stream, in latitude 39° 48′ N., longitude 70° 36′ W., in 551 fathoms.

Genus 262. NANNOBRACHIUM Günther.

Nannobrachium Günther, Deep Sea Fishes, Challenger, 199, 1887 (*nigrum*).

860. Nannobrachium leucopsarum (Eigenmann & Eigenmann).

Pacific Coast of America from Alaska to San Diego.

Myctophum (*Stenobrachius*) *leucopsarum* Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1890, 5, off Point Loma, California, in stomachs of *Sebastodes*.

861. Nannobrachium nannochir (Gilbert).

Alaska to Santa Barbara Islands, in deep water.

Myctophum nannochir Gilbert, Proc. U. S. Nat. Mus. 1890, 51, off Washington, at Albatross Stations 2925, 3072, and others, in 266 to 685 fathoms.

862. Nannobrachium mexicanum (Gilbert).

Coast of Lower California, in deep water.

Myctophum mexicanum Gilbert, Proc. U. S. Nat. Mus. 1890, 51, off Lower California, at Albatross Stations 3008 and 3009, in 306 and 857 fathoms.

863. Nannobrachium regale (Gilbert).

Santa Barbara Channel, in deep water.

Myctophum regale Gilbert, Proc. U. S. Nat. Mus. 1891, 544, Santa Barbara Channel, California, at Albatross Station 2923, in 822 fathoms.

864. Nannobrachium macdonaldi Goode & Bean.

Gulf Stream.

Nannobrachium macdonaldi Goode & Bean, Oceanic Ichthyology, 94, fig. 110, 1896, Gulf Stream.

Genus 263. DIAPHUS Eigenmann & Eigenmann.

Diaphus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., 2d series, III. 1890, 3 (*theta*).

865. Diaphus theta Eigenmann & Eigenmann.

Point Loma, near San Diego, to coast of Oregon.

Diaphus theta Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., III. 1890, 4. Point Loma, near San Diego, California.

Genus 264. ÆTHOPRORA Goode & Bean.

Æthoprora Goode & Bean, Oceanic Ichthyology, 86, 1896 (*metopoclampum*).

866. Æthoprora lucida Goode & Bean.

Gulf Stream.

Æthoprora lucida Goode & Bean, Oceanic Ichthyology, 87, fig. 102, 1896, Gulf Stream, in latitude 19° 45′ N., longitude 75° 4′ W.

867. Æthoprora effulgens Goode & Bean.

Western Atlantic.

Æthoprora effulgens Goode & Bean, Oceanic Ichthyology, 87, fig. 103, 1896, Browns Bank and Albatross Station 2127, 19° 45′ N., 75° W.

Genus 265. COLLETTIA Goode & Bean.

Collettia Goode & Bean, Oceanic Ichthyology, 88, 1896 (*rafinesquei*).

868. Collettia rafinesquei (Cocco).

Mediterranean and Atlantic; Gulf Stream, off the New England coast.

Myctophus rafinesquei Cocco, Alcuni Salmon., etc., 20, 1820, Messina.

869. Collettia nocturna (Poey).

Coast of Cuba.

Myctophum nocturnum Poey, Memorias, II, 426, 1861, Cuba.

Genus 266. RHINOSCOPELUS Lütken.

Rhinoscopelus Lütken, Vid. Selsk. Natur. Kjöbenhavn, VII, 1892, 237 (*coccoi*).

870. Rhinoscopelus coccoi (Cocco).

Western Atlantic, Gulf Stream, Mediterranean, and ranging from Newfoundland to Africa.

Scopelus coccoi Cocco, Giorn. Sci. Litt. Art. Sicilia (No. 77), Palermo, 1829, 143 ("*Scopelo de Cocco*"), Palermo.

Doubtful genus.

[illegible] of the [illegible] [illegible] for review

871. Rhinoscopelus andreæ (Lütken).
Open Atlantic and Indian Ocean; Gulf Stream.
Scopelus andreæ Lütken, Spolia Atlantica, Scopelini, 25, 1892, North Atlantic.

872. Rhinoscopelus rarus (Lütken).
Open Atlantic, west to 50° W., 33° N.
Scopelus rarus Lütken, Spolia Atlantica, Scopelini, II, 26, 1892, North Atlantic

Genus 267. MYCTOPHUM Rafinesque.
Myctophum Rafinesque, Indice d'Ittiologia Siciliana, 56, 1810 (*punctatum*).

873. Myctophum punctatum Rafinesque.
Warmer parts of the Atlantic, Grand Banks, and from the Gulf Stream to the Mediterranean.
Myctophum punctatum Rafinesque, Indice d'Ittiologia Siciliana, 56, pl. 2, fig. 5, 1810, Palermo.

874. Myctophum affine (Lütken).
Open Atlantic, west to 63° W., 38° N.
Scopelus affinis Lütken, Spolia Atlantica, II, 32, 1892, open Atlantic.

875. Myctophum opalinum Goode & Bean.
Western Atlantic.
Myctophum opalinum Goode & Bean, Oceanic Ichthyology, 72, fig. 81, 1896, Gulf Stream.

876. Myctophum humboldti (Risso).
Open seas, Mediterranean, and Atlantic on both shores.
Gasteropelecus humboldti Risso, Ichth. Nice, 358, 1810, Nice.

877. Myctophum californiense Eigenmann & Eigenmann.
Cortez Banks, near San Diego, California.
Myctophum californiense Eigenmann, West Am. Sci., November 9, 1889, 124, San Diego, California.

878. Myctophum gracile (Lütken).
Open Atlantic, west to 48° W., 23° N.
Scopelus gracilis Lütken, Spolia Atlantica, II, 35, 1892, open Atlantic.

879. Myctophum benoiti (Cocco).
Mediterranean to Norway and Greenland.
Scopelus benoiti Cocco, Lett. su. Salmon., 12, pl. 2, fig. 4, 1838, Messina.

880. Myctophum hygomii (Lütken).
North Atlantic, occasional in our waters.
Scopelus hygomii Lütken, Spolia Atlantica, Scopelini, 256, 1892, North Atlantic.

Genus 268. BENTHOSEMA Goode & Bean.
Benthosema Goode & Bean, Oceanic Ichthyology, 75, 1896 (*mulleri*).

881. Benthosema mulleri (Gmelin).
North Atlantic, Norway to Greenland; South Carolina.
Salmo mulleri Gmelin, Syst. Nat., 1378, 1788, Norway; after Strom.

882. Benthosema arcticum (Lütken).
Davis Straits, Greenland.
Scopelus arcticum Lütken, Spolia Atlantica, Scopelini, 29, 1892, Davis Straits.

Genus 269. DASYSCOPELUS Günther.
Dasyscopelus Günther, Cat., V, 405, 1864 (*asper*).

883. Dasyscopelus spinosus (Steindachner).
Open seas; mid-Atlantic; Hawaiian Islands, etc.
Scopelus spinosus Steindachner, Sitzungsber. Ichth. Notiz., V, 11, 1867, China.

Genus 270. TARLETONBEANIA Eigenmann & Eigenmann.

Tarletonbeania Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., IV, 1890, 7 (*tenua*).

884. Tarletonbeania crenularis (Jordan & Gilbert).

Santa Barbara Channel; coast of Washington.

Myctophum crenulare Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 274, Santa Barbara, California.

885. Tarletonbeania tenua Eigenmann & Eigenmann.

Coronado Islands, near San Diego.

Tarletonbeania tenua Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., IV, 1890, 7, Coronado Islands, near San Diego, California.

Family LXXVI. MAUROLICIDÆ.

Genus 271. MAUROLICUS Cocco.

Maurolicus Cocco, Lett. su. Salmon., 32, 1838 (*amethystino* = *punctatus*).

886. Maurolicus pennanti (Walbaum).

Open seas, widely distributed; New England coast at Nahant, Provincetown, Woods Hole, etc.

Argentina pennanti Walbaum, Artedi Pisc., 47, 1792, England; after "*Sheppy argentine*" of Pennant.

Genus 272. VINCIGUERRIA Jordan & Evermann.

Vinciguerria Jordan & Evermann, Fishes North and Middle America, 577, 1896 (*attenuata*).

887. Vinciguerria attenuata (Cocco).

Open Atlantic, west to the Bahama region.

Maurolicus attenuatus Cocco, Lett. su. Salmon., 33, 1838, coast of Italy.

Genus 273. VALENCIENNELLUS Jordan & Evermann.

Valenciennellus Jordan & Evermann, Fishes North and Middle America, 577, 1896 (*tripunctulatus*).

888. Valenciennellus tripunctulatus (Esmark).

Madagascar; Denmark Straits, between Greenland and Iceland.

Maurolicus tripunctulatus Esmark, Christiania Vid. Selsk. Forh., 488, 1870, Madagascar.

Family LXXVII. CHAULIODONTIDÆ. The Viper-Fishes.

Genus 274. GONOSTOMA Rafinesque.

Gonostoma Rafinesque, Indice d'Ittiologia Siciliana, 64, 1810 (*denudatum*).

889. Gonostoma denudatum Rafinesque.

Gulf of Mexico at Albatross Station 2665; off Morocco and Cape Verdes; Mediterranean Sea.

Gonostoma denudata Rafinesque, Indice d'Ittiol. Sicil., 65, 1810, Palermo.

890. Gonostoma brevidens Kner & Steindachner.

Grenada; Bahama Channel; Bequia.

Gonostoma brevidens Kner & Steindachner, Sitzb. Akad. Wissensch., Wien, LXI, 1870, 443, Atlantic.

Genus 275. BONAPARTIA Goode & Bean.

Bonapartia Goode & Bean, Oceanic Ichthyology, 102, 1896 (*pedaliota*).

891. Bonapartia pedaliota Goode & Bean.

Gulf Stream.

Bonapartia pedaliota Goode & Bean, Oceanic Ichthyology, 102, fig. 120, 1896, Gulf Stream, at Albatross Station 2642.

Name [illegible] in Bird).

Bogoslof.

Genus 276. CYCLOTHONE Goode & Bean.

Cyclothone Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 221, 1882 (*lusca*).

Subgenus CYCLOTHONE Goode & Bean.

892. Cyclothone microdon (Günther).

Bermuda; Atlantic, Pacific, and Antarctic oceans; Pacific Coast from Oregon to Panama.

Gonostoma microdon Günther, Ann. Mag. Nat. Hist., II, 1878, 188, near Bermuda.

893. Cyclothone bathyphila (Vaillant).

Gulf of Gascony and off the Azores; western Atlantic.

Neostoma bathyphilum Vaillant, La Nature, 1884, 184, name and rough figure only.

Subgenus SIGMOPS Gill.

Sigmops Gill, Proc. U. S. Nat. Mus. 1883, 256 (*stigmaticus*).

894. Cyclothone elongata (Günther).

New Guinea; Banda; American coast; Gulf Stream; Indian Ocean.

Gonostoma elongatum Günther, Ann. Mag. Nat. Hist., II, 1878, 187, New Guinea; Banda.

Genus 277. YARRELLA Goode & Bean.

Yarrella Goode & Bean, Oceanic Ichthyology, 103, 1896 (*blackfordi*).

895. Yarrella blackfordi Goode & Bean.

Gulf Stream.

Yarrella blackfordi Goode & Bean, Oceanic Ichthyology, 103, fig. 121, 1896, Gulf Stream, at Albatross Station 2376, in 324 fathoms.

Genus 278. CHAULIODUS Bloch & Schneider.

Chauliodus Bloch & Schneider, Syst. Ichth., 430, 1801 (*sloanei*).

896. Chauliodus sloanei Bloch & Schneider.

Mediterranean and deep waters of the Atlantic; Georges Banks.

Chauliodus sloanei Bloch & Schneider, Syst. Ichth., 430, 1801, Atlantic; after *Vipera marina* of Catesby.

897. Chauliodus macouni Bean.

Coast of California to British Columbia and Queen Charlotte Islands.

Chauliodus macouni Bean, Proc. U. S. Nat. Mus. 1890, 44, off Queen Charlotte Islands.

Family LXXVIII. ASTRONESTHIDÆ.

Genus 279. ASTRONESTHES Richardson.

Astronesthes Richardson, Ichth. Voy. Sulph., 97, 1845 (*niger*).

898. Astronesthes niger Richardson.

Deep waters of all seas.

Astronesthes niger Richardson, Ichth. Voy. Sulph., 97, 1845, Atlantic.

899. Astronesthes gemmifer Goode & Bean.

Gulf Stream.

Astronesthes gemmifer Goode & Bean, Oceanic Ichthyology, 105, fig. 124, 1896, Grand Banks, latitude 44° 25′ N., longitude 53° 12′ W., in 300 fathoms.

900. Astronesthes richardsoni (Poey).

Deep waters of West Indies; Indian and Pacific oceans.

Chauliodus richardsoni Poey, Memorias, I, 176, 1855, Cuba.

Family LXXIX. STOMIATIDÆ.

Genus 280. STOMIAS Cuvier.

Stomias Cuvier, Règne Anim., ed. I, 184, 1817 (*boa*).

901. Stomias ferox Reinhardt.

Greenland and southward; Gulf Stream from Bahama Channel to the Grand Banks.

Stomias ferox Reinhardt, Vidensk. Selsk. Naturv., etc., x, 77, 1842, Greenland.

902. Stomias affinis Günther.

Sombrero Island.

Stomias affinis Günther, Deep Sea Fishes, Challenger, XXII, 205, pl. 54, fig. A, 1887, off Sombrero Island.

Genus 281. ECHIOSTOMA Lowe.

Echiostoma Lowe, Proc. Zool. Soc. Lond. 1843, 87 (*barbatum*).

903. Echiostoma barbatum Lowe.

Madeira; Gloucester, Mass., and southward in the Gulf Stream to the old Bahama Channel.

Echiostoma barbatum Lowe, Proc. Zool. Soc. Lond. 1843, 88, Madeira.

904. Echiostoma margarita Goode & Bean.

Middle of the Gulf of Mexico.

Echiostoma margarita Goode & Bean, Oceanic Ichthyology, 109, fig. 131, 1896, Gulf of Mexico.

LUT 282. GRAMMATOSTOMIAS Goode & Bean.

Grammatostomias Goode & Bean, Oceanic Ichthyology, 110, 1896 (*dentatus*).

905. Grammatostomias dentatus Goode & Bean.

Gulf Stream.

Grammatostomias dentatus Goode & Bean, Oceanic Ichthyology, 110, fig. 133, 1896, Gulf Stream, in latitude 38° 19′ 20″ N., longitude 69° 2′ 30″ W.

Genus 283. PHOTONECTES Günther.

Photonectes Günther, Challenger Report, XXII, 212, 1887 (*albipinnis*).

906. Photonectes gracilis Goode & Bean.

Martinique.

Photonectes gracilis Goode & Bean, Oceanic Ichthyology, 112, 1896, off Martinique.

Family LXXX. MALACOSTEIDÆ.

Genus 284. MALACOSTEUS Ayres.

Malacosteus Ayres, Jour. Bost. Soc. Nat. Hist. 1849, 53 (*niger*).

907. Malacosteus niger Ayres.

Open sea; Gulf Stream and southward to Barbados.

Malacosteus niger Ayres, Jour. Bost. Soc. Nat. Hist. 1849, 53, Gulf Stream, 42° N., 60° W.

Family LXXXI. ALEPISAURIDÆ. The Lancet-Fishes.

Genus 285. ALEPISAURUS Lowe. *Lancet-fishes.*

Alepisaurus Lowe, Proc. Zool. Soc. Lond. 1833, 104 (*ferox*).

Subgenus ALEPISAURUS Lowe.

908. Alepisaurus ferox Lowe.

Deep waters of the Atlantic; coasts of Nova Scotia and Massachusetts, and the Grand Banks.

Alepisaurus ferox Lowe, Trans. Zool. Soc. Lond., I, 1833, 395, Madeira.

Ceulopus · good genus.

Evernaemella
for
obsoletonus!

[illegible] of [illegible]

909. Alepisaurus æsculapius (Bean). *Sabatka; Wolf-fish.*
Coast of Alaska to California; Unalaska and elsewhere.
Alepidosaurus æsculapius Bean, Proc. U. S. Nat. Mus. 1882, 661. Unalaska.

Subgenus CAULOPUS Gill.
Caulopus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 128 (*altirelis*).

910. Alepisaurus altivelis Poey. *Conejo.*
Cuba.
Alepisaurus altivelis Poey, Memorias, II, 302, 1860, Cuba.

911. Alepisaurus borealis (Gill). *Handsaw-fish.*
Pacific Coast of America from Alaska to Puget Sound.
Alepidosaurus (*Caulopus*) *borealis* Gill, Proc. Ac. Nat. Sci. Phila. 1862, 128, Puget Sound.

912. Alepisaurus serra (Gill). *Serra.*
Monterey, California.
Alepidosaurus (*Caulopus*) *serra* Gill, Proc. Ac. Nat. Sci. Phila. 1862, 129, Monterey, California.

Family LXXXII. ODONTOSTOMIDÆ.

Genus 286. OMOSUDIS Günther.
Omosudis Günther, Challenger Report, XXII, 201, 1887 (*lowii*).

913. Omosudis lowii Günther.
Open sea; Gulf Stream, at Albatross Station 2392.
Omosudis lowii Günther, Challenger Report, XXII, 201, pl. 52, figs. *c*, *c'*, 1887, Philippine Islands; Magdalena.

Family LXXXIII. PARALEPIDIDÆ.

Genus 287. SUDIS Rafinesque.
Sudis Rafinesque, Caratteri di Alcuni Nuovi Generi, etc., 60, 1810 (*hyalina*).

914. Sudis intermedius (Poey).
Matanzas, Cuba.
Paralepis intermedius Poey, Repertorio, II, 416, 1867, Matanzas.

915. Sudis ringens Jordan & Gilbert.
Santa Barbara Channel, California.
Sudis ringens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 273, Santa Barbara.

Genus 288. ARCTOZENUS Gill.
Arctozenus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 188 (*borealis*).

916. Arctozenus borealis (Reinhardt).
Greenland and southward to Cape Ann.
Paralepis borealis Reinhardt, Naturv. Math. Afhandl., VII, 115, 1832, Greenland.

917. Arctozenus coruscans (Jordan & Gilbert).
Puget Sound.
Paralepis coruscans Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 411, harbor of Port Townsend, Washington.

Genus 289. PARALEPIS Risso.
Paralepis Risso, Hist. Nat. Eur. Mérid., III, 472, 1826 (*coregonoides*).

918. Paralepis coregonoides Risso.
Mediterranean; Gulf Stream at Albatross Station 2393.
Paralepis coregonoides Risso, Hist. Nat. Eur. Mérid., III, 472, pl. 7, fig. 15, 1826, Nice.

Family LXXXIV. STERNOPTYCHIDÆ.

Genus 290. STERNOPTYX Hermann.

Sternoptyx Hermann, Naturforscher, XVI, 8, 1771 (*diaphana*).

919. Sternoptyx diaphana Hermann.

Atlantic; Gulf Stream, from Santa Cruz Island to the Grand Banks.
Sternoptyx diaphana Hermann, Naturforscher, XVI, 8, 1771, Jamaica.

Genus 291. ARGYROPELECUS Cocco.

Argyropelecus Cocco, Giorn. Sci. Sicil., fasc. 77, 146, 1829 (*hemigymnus*).

920. Argyropelecus hemigymnus Cocco.

Atlantic and Mediterranean; Gulf Stream off southern New England.
Argyropelecus hemigymnus Cocco, Giorn. Sci. Sicil., fasc. 77, 146, 1829, coast of Italy.

921. Argyropelecus olfersi (Cuvier).

Open Atlantic; coast of Norway to Brazil and Cape of Good Hope, Grand Banks southward in the Gulf Stream.
Sternoptyx olfersi Cuvier, Règne Anim., ed. 2, II, 316, 1829, near Cape of Good Hope.

Family LXXXV. IDIACANTHIDÆ.

Genus 292. IDIACANTHUS Peters.

Idiacanthus Peters, Monatsber. Akad. Wiss. Berlin 1876, 846 (*fasciola*).

922. Idiacanthus ferox (Günther).

North Atlantic.
Bathyophis ferox Günther, Ann. Mag. Nat. Hist., II, 1878, 181, North Atlantic.

923. Idiacanthus antrostomus Gilbert.

Coast of southern California, in deep water.
Idiacanthus antrostomus Gilbert, Proc. U. S. Nat. Mus. 1890, 54, off southern California, at Albatross Station 2980, in 603 fathoms.

Order U. LYOPOMI.

Family LXXXVI. HALOSAURIDÆ.

Genus 293. HALOSAURUS Johnson.

Halosaurus Johnson, Proc. Zool. Soc. Lond. 1863, 406 (*oweni*).

924. Halosaurus oweni Johnson.

Madeira; Gulf Stream, at Albatross Station 2181; Guadeloupe and Santa Lucia.
Halosaurus oweni Johnson, Proc. Zool. Soc. Lond. 1863, 406, pl. 36, fig. 2, Madeira.

925. Halosaurus guntheri Goode & Bean.

Gulf Stream.
Halosaurus guntheri Goode & Bean, Oceanic Ichthyology, 131, 1896, Gulf Stream, in latitude 39° 13′ N., longitude 72° W., Albatross Station 2722.

Genus 294. ALDROVANDIA Goode & Bean.

Aldrovandia Goode & Bean, Oceanic Ichthyology, 132, 1896 (*rostratus*).
August.

926. Aldrovandia rostrata (Günther).

Mid-Atlantic.
Halosaurus rostratus Günther, Ann. Mag. Nat. Hist., II, 1878, 252, mid-Atlantic.

927. Aldrovandia macrochir (Günther).

Marion Island; Blake Stations 308 and 325.
Halosaurus macrochir Günther, Ann. Mag. Nat. Hist., II, 1878, 251, between Cape of Good Hope and Kerguelen Island.

also of Japan.

Halosaurus [illegible]. June 1896

928. Aldrovandia goodei (Gill).

Gulf Stream, at Albatross Stations 2037 in 1,731 fathoms, 2051 in 1,106 fathom 2035 in 1,362 fathoms, and 2052 in 1,098 fathoms.

Halosaurus goodei Gill, Proc. U. S. Nat. Mus. 1883, 257, Gulf Stream, at Albatross Stations 2035, 2037, 2051, and 2052, off South Carolina.

929. Aldrovandia gracilis Goode & Bean.

Gulf Stream and Gulf of Mexico.

Aldrovandia gracilis Goode & Bean, Oceanic Ichthyology, 134, fig. 157, 1896, off Guadeloupe, and in Gulf Stream at Albatross Station 2380, latitude 28° 2′ 30″ N., longitude 87° 43′ 45″ W.; also Albatross Station 2381, latitude 28° 5′ N., longitude 87° 56′ 15″ W.

930. Aldrovandia pallida Goode & Bean.

Gulf Stream, at Albatross Station 173 in 955 fathoms in Gulf Stream.

Aldrovandia pallida Goode & Bean, Oceanic Ichthyology, 135, fig. 158, 1896, Gulf of Mexico.

Order V. HETEROMI. The Spiny Eels.

Family LXXXVII. NOTACANTHIDÆ.

Genus 295. NOTACANTHUS Bloch.

Notacanthus Bloch, Abhandl. Böhmischen Gesellsch. der Wissenschaft, I, 278, 1787 (*chemnitzii*) (*nasus*).

931. Notacanthus chemnitzii Bloch.

Greenland; West Indies; Iceland; Scandinavia; South Greenland.

Notacanthus chemnitzii Bloch, Abhandl. Böhmischen Gesellsch. der Wissenschaft, I, 278, 1787, Northern Sea.

932. Notacanthus analis Gill.

Gulf Stream.

Notacanthus analis Gill, Proc. U. S. Nat. Mus. 1883, 255, latitude 40° N., longitude 69° W., at Albatross Stations 2677 in 478 fathoms, and 2676 in 407 fathoms.

933. Notacanthus phasganorus Goode.

Grand Banks, Newfoundland.

Notacanthus phasganorus Goode, Proc. U. S. Nat. Mus., III, 1880, 535, Grand Banks of Newfoundland.

Genus 296. MACDONALDIA Goode & Bean.

Macdonaldia Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 467 (*rostrata*).

934. Macdonaldia rostrata (Collett).

Gulf Stream.

Notacanthus rostratus Collett, Bull. Soc. Zool. France, 1889, 307, off Newfoundland, at Albatross Stations 2216 in 963 fathoms, and 2553 in 551 fathoms.

935. Macdonaldia challengeri (Vaillant).

North Pacific and Bering Sea.

Notacanthus challengeri Vaillant, Expédition Travailleur et Talisman, 1888, south of Yeddo.

Family LXXXVIII. LIPOGENYIDÆ.

Genus 297. LIPOGENYS Goode & Bean.

Lipogenys Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 469 (*gillii*).

936. Lipogenys gillii Goode & Bean.

Gulf Stream.

Lipogenys gillii Goode & Bean, Proc. U. S. Nat. Mus. 1894 (1895), 469, pl. 18, *fig. 3, and in Oceanic Ichthyology*, 173, 1896, Station 2742, Gulf Stream.

Order W. XENOMI.

Family LXXXIX. DALLIIDÆ. The Alaska Blackfishes

Genus 298. DALLIA Bean.

Dallia Bean, Proc. U. S. Nat. Mus. 1879, 358 (*pectoralis*).

937. Dallia pectoralis Bean. *Alaska Blackfish; Charnia Ryba.*

Northern Alaska and Siberia.

Dallia pectoralis Bean, Proc. U. S. Nat. Mus. 1879, 358, St. Michaels, Alaska.

Order X. HAPLOMI. The Pike-like Fishes.

Family XC. UMBRIDÆ. The Mud Minnows.

Genus 299. UMBRA (Krämer) Müller.

Umbra Krämer, Anim. Austr. Infer. 1756; Müller, Abhandl. Akad. Wiss. Wien, Berlin, 188, 1842 (*crameri*).

Subgenus MELANURA Agassiz.

Melanura Agassiz, Am. Jour. Sci. Arts 1854, 135 (*annulata*, etc., = *pygmæa*).

938. Umbra limi (Kirtland). *Mud Minnow; Dogfish.*

Quebec to Minnesota and southward to the Ohio River.

Hydrargyra limi Kirtland, Bost. Jour. Nat. Hist., III, 1840, 277, streams in northern Ohio.

939. Umbra pygmæa (DeKay). *Eastern Mud Minnow.*

Lowland streams and coastwise swamps from Long Island to Neuse River.

Leuciscus pygmæus DeKay, New York Fauna: Fishes, 214, 1842, Tappan, Rockland County, New York.

Family XCI. LUCIIDÆ. The Pikes.

Genus 300. LUCIUS Rafinesque.

Lucius Rafinesque, Caratteri di Alcuni Nuovi Generi, 59, 1810 (*lucius*).

Subgenus KENOZA Jordan & Evermann.

Kenoza Jordan & Evermann, Fishes North and Middle America, 625, 1896 (*americanus*).

940. Lucius americanus (Gmelin). *Banded Pickerel.*

Massachusetts to Florida, east of Alleghany Mountains; Escambia River at Flomaton, Alabama.

Esox lucius (*B. americanus*) Gmelin, Syst. Nat., 1390, 1788, Long Island, New York; after Schöpf.

941. Lucius vermiculatus (LeSueur). *Little Pickerel.*

Mississippi Valley, tributaries of Lake Erie and Lake Michigan, south to Mississippi and Arkansas.

Esox vermiculatus LeSueur, in Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 333, 1846, Wabash River, New Harmony, Indiana.

942. Lucius reticulatus (LeSueur). *Common Eastern Pickerel; Green Pike; Jack.*

Maine to Florida, Louisiana, Arkansas, and Tennessee.

Esox reticulatus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1818, 414, Connecticut River, Adams, Massachusetts; Philadelphia.

Subgenus LUCIUS Rafinesque.

943. Lucius lucius (Linnæus). *Common Pike; Pickerel.*

Fresh waters of the northern parts of Europe, Asia, and North America, north to Alaska and Siberia; in the eastern United States south to New York and the Ohio River; in Europe south to Italy and Greece.

Esox lucius Linnæus, Syst. Nat., ed. X, 314, 1758, Europe.

Gronow.

Cox

Fundus bibliotecae [illegible] Guzman
[illegible] de Saint Hermano.

Subgenus MASCALONGUS Jordan.

Mascalongus Jordan, Klippart's Report Ohio Fish Com., 92, 1878 (*nobilior*).

944. Lucius masquinongy (Mitchill). *Muskallunge; Maskinongy; Muscalonge.*

Great Lakes region; Upper Mississippi Valley and northward.

Esox masquinongy Mitchill, Mirror, 1824, 297.

944a. Lucius masquinongy ohiensis (Kirtland). *Ohio Muscalonge.*

Ohio River and its tributaries.

Esox ohiensis Kirtland, Proc. Cleveland Ac. Nat. Sci., February 7, 1854, 85, Mahoning River, Ohio.

944b. Lucius masquinongy immaculatus (Garrard). *Great Northern Pike.*

Lakes of Wisconsin and Minnesota; also in Chautauqua Lake and Conneaut Lake.

Esox immaculatus Garrard MS., noticed in different fishing journals; Jordan, Manual, ed. 5, 89, 1888, Eagle Lake, northern Wisconsin.

Family XCII. POECILIIDÆ. The Killifishes.

Genus 301. FUNDULUS Lacépède. *Killifishes.*

Fundulus Lacépède, Hist. Nat. Poiss., v, 37, 1803 (*mudfish*).

Subgenus FUNDULUS Lacépède.

945. Fundulus punctatus Günther.

Chiapas.

Fundulus punctatus Günther, Cat., VI, 320, 1866, Chiapas.

946. Fundulus vinctus Jordan & Gilbert.

Coast of Lower California.

Fundulus vinctus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 355, Cape San Lucas.

947. Fundulus pallidus Evermann.

Galveston Bay and Swan Lake, Texas.

Fundulus pallidus Evermann, Bull. U. S. Fish Com. 1891 (1892), 84, Swan Lake, near Galveston Bay, Galveston, Texas.

948. Fundulus similis (Baird & Girard). *Sac-a-Lait.*

Coast of the Gulf States.

Hydrargyra similis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 389, Indianola, Texas.

949. Fundulus majalis (Walbaum). *Killifish; Mayfish; Rockfish.*

Cape Cod to Florida.

Cobitis majalis Walbaum, Artedi Pisc., 12, 1792, Long Island.

950. Fundulus parvipinnis Girard.

Coast of California from Point Conception southward to Lower California.

Fundulus parvipinnis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 154, San Diego.

951. Fundulus lima Vaillant.

Lower California.

Fundulus lima Vaillant, Bull. Soc. Philom. 1894, 71, San Ignatio de Caracamande, Lower California.

952. Fundulus heteroclitus (Linnæus). *Common Killifish; Mudfish; Mud Dabbler; Mummichog; Cobbler.*

Coast of Maine to the Rio Grande; Gulf Coast.

Cobitis heteroclita Linnæus, Syst. Nat., ed. XII, 500, 1766, Charleston; after the *Mudfish* of Dr. Garden.

952a. Fundulus heteroclitus grandis (Baird & Girard).

Gulf Coast of United States.

Fundulus grandis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 389, Indianola, Texas.

953. Fundulus ocellaris Jordan & Gilbert.

Gulf Coast of Florida to Louisiana.

Fundulus ocellaris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 255, Pensacola, Florida, in salt water.

954. Fundulus fonticola Cuvier & Valenciennes.

Mountain springs in Porto Rico.

Fundulus fonticola Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 198, 1846, Porto Rico.

955. Fundulus bermudæ Günther. *Mangrove Minnow.*

Bermudas.

Fundulus bermudæ Günther, Ann. Mag. Nat. Hist. 1874, 4, reprint, Bermudas.

956. Fundulus robustus Bean.

Streams of Guanajuato.

Fundulus robustus Bean, Proc. U. S. Nat. Mus. 1892, 285, Guanajuato.

957. Fundulus labialis Günther.

River of Guatemala.

Fundulus labialis Günther, Cat., VI, 319, 1866, Rio San Geronimo; Yzabal.

Subgenus FONTINUS Jordan & Evermann.

Fontinus Jordan & Evermann, Fishes North and Middle America, 645, 1896 (*seminolis*).

958. Fundulus adinia Jordan & Gilbert.

Rio Grande Basin.

Fundulus adinia Jordan & Gilbert, Synopsis, 335, 1883, Rio Grande at Brownsville, Texas.

959. Fundulus diaphanus (LeSueur).

Maine to Cape Hatteras in river mouths; New York to northern Illinois in lakes.

Hydrargyra diaphana LeSueur, Jour. Ac. Nat. Sci. Phila., I, 1817, 130, Saratoga Lake, New York.

959a. Fundulus diaphanus menona (Jordan & Copeland).

Ohio westward to the Mississippi River; Lake Menona, near Madison, Wis.

Fundulus menona Jordan & Copeland, Proc. Ac. Nat. Sci. Phila. 1877, 68, lakes about Madison, Wisconsin.

960. Fundulus extensus Jordan & Gilbert.

Coast of Lower California.

Fundulus extensus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 355, Cape San Lucas.

961. Fundulus seminolis Girard.

Florida.

Fundulus seminolis Girard, Proc. Ac. Nat. Sci. Phila. 1859, 59, Palatka, eastern Florida.

Subgenus PLANCTERUS Garman.

Plancterus Garman, Cyprinodonts, 96, 1895 (*kansæ* = *zebrinus*).

962. Fundulus zebrinus Jordan & Gilbert.

Kansas to Texas and New Mexico, in upper tributaries of Arkansas and Red rivers.

Fundulus zebrinus Jordan & Gilbert, Synopsis, 891, 1883 (substitute for *zebra* Girard, preoccupied), streams between Fort Defiance and Fort Union, New Mexico; doubtless headwaters of Canadian River, near Fort Union.

Subgenus XENISMA Jordan.

Xenisma Jordan, Bull. Buffalo Soc. Nat. Hist. 1876, 142 (*stellifera*).

963. Fundulus catenatus (Storer). *Studfish.*

Tennessee and Cumberland rivers and clear streams of the Ozark Mountains.

Pœcilia catenata Storer, Synopsis, 430, 1846, Tennessee River, Florence, Alabama.

964. Fundulus stellifer (Jordan). *Studfish.*

Alabama River and tributaries.

Xenisma stellifera Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 322, Etowah and Oostanaula rivers, Rome, Georgia.

Subgenus GAMBUSINUS Jordan & Evermann.

Gambusinus Jordan & Evermann, Fishes North and Middle America, 649, 1896 (*rathbuni*).

965. Fundulus lineatus (Garman).

Northeastern Wyoming.

Zygonectes lineatus Garman, Bull. Mus. Zool., VIII, No. 3, 88, 1881, northeastern Wyoming.

966. Fundulus rathbuni Jordan & Meek.

Eastern North Carolina.

Fundulus rathbuni Jordan & Meek, Proc. U. S. Nat. Mus. 1888, 356, Reedy Fork, Allemance Creek, Buffalo Creek, and other tributaries of Cape Fear River about Greensboro, North Carolina; Jumping Run, tributary of Yadkin River, Salisbury, North Carolina.

967. Fundulus albolineatus Gilbert.

Tennessee Basin in Alabama.

Fundulus albolineatus Gilbert, Bull. U. S. Fish Com. 1889, 149, Spring Creek, Huntsville, Alabama.

968. Fundulus confluentus Goode & Bean.

Eastern Florida.

Fundulus confluentus Goode & Bean, Proc. U. S. Nat. Mus. 1879, 118, Lake Monroe, Florida.

969. Fundulus funduloides (Evermann).

Coast of Texas.

Zygonectes funduloides Evermann, Bull. U. S. Fish. Com. 1891 (1892), 85, Dickinson Bayou, Dickinson, Texas, on Galveston Bay.

Subgenus ZYGONECTES Agassiz.

Zygonectes Agassiz, Am. Jour. Sci. Arts 1854, 135 (*olivacea* = *notatus*).

970. Fundulus macdonaldi (Meek).

Tributaries of Gasconade and Neosho rivers, southern Missouri.

Zygonectes macdonaldi Meek, Bull. U. S. Fish Com. 1889, 122, Jones Creek, Dixon, Mo.; Osage Fork of Gasconade River, at Mansfield; Neosho River.

971. Fundulus floripinnis (Cope).

Platte River and Arkansas River, in Colorado; Cherry Creek, a tributary of the Arkansas.

Haplochilus floripinnis Cope, Zool. Lieut. Wheeler's Expl. W. 100th Mer., V, 695, 1876, Platte River, at Denver, Colorado.

972. Fundulus jenkinsi (Evermann).

Coast of Texas.

Zygonectes jenkinsi Evermann, Bull. U. S. Fish Com. 1891 (1892), 86, Dickinson Bayou, Galveston Bay.

973. Fundulus pulvereus (Evermann).

Coast of Texas.

Zygonectes pulvereus Evermann, Bull. U. S. Fish Com. 1891 (1892), 85, Dickinson Bayou; Buffalo Bayou at Houston; Oso Creek at Corpus Christi, Texas.

974. Fundulus arlingtonius (Goode & Bean).

Arlington River, a tributary of St. Johns River, Florida.

Gambusia arlingtonia Goode & Bean, Proc. U. S. Nat. Mus. 1879, 118, Arlington River, Florida.

975. Fundulus henshalli (Jordan).

Southern Florida.

Zygonectes henshalli Jordan, Proc. U. S. Nat. Mus. 1879, 237, San Sebastian River, Florida.

976. Fundulus rubrifrons (Jordan).

Eastern Florida.

Zygonectes rubrifrons Jordan, Proc. U. S. Nat. Mus. 1879, 237, San Sebastian River, Florida.

977. Fundulus scartes Meek.

Eastern Arkansas.

Fundulus scartes Meek, Bull. U. S. Fish Com. 1895 (1896), 347, St. Francis River, Big Bay, Arkansas.

978. Fundulus sciadicus Cope.

Middle Missouri River basin.

Fundulus sciadicus Cope, Proc. Ac. Nat. Sci. Phila. 1865, 78, Platte River, Nebraska.

979. Fundulus luciæ (Baird & Girard).

Atlantic Coast from Long Island to Virginia.

Hydragyra luciæ Baird, Ninth Smithson. Rept. 1855, 344, Beesley Point, New Jersey.

980. Fundulus goodei (Jordan).

Everglades region; Alligator, Arlington, Peace, and Withlacoochee rivers.

Lucania goodei Jordan, Proc. U. S. Nat. Mus. 1879, 240, Arlington River, Florida, a tributary of the St. Johns.

981. Fundulus chrysotus Holbrook.

South Carolina to Florida.

Fundulus chrysotus Holbrook MS., 1860, Charleston, South Carolina.

982. Fundulus cingulatus Cuvier & Valenciennes.

South Carolina to Florida; Escambia River at Flomaton, Alabama.

Fundulus cingulatus Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 197, 1846, "United States."

983. Fundulus nottii (Agassiz). *Star-headed Minnow.*

Florida and neighboring States.

Zygoncotes nottii Agassiz, Am. Jour. Sci. Arts 1854, 353, Mobile, Alabama.

984. Fundulus guttatus (Agassiz).

Florida to Texas.

Zygonectes guttatus Agassiz, Am. Jour. Sci. Arts 1854, 353, Mobile, Alabama.

985. Fundulus dispar (Agassiz).

Northern Ohio to Illinois, south to Mississippi; Maumee, Wabash, Big Black, and Pearl rivers.

Zygonectes dispar Agassiz, Am. Jour. Sci. Arts 1854, 353, creeks opposite St. Louis; Beardstown, Illinois.

986. Fundulus notatus (Rafinesque). *Top Minnow.*

Michigan to Alabama, Mississippi, and Texas.

Semotilus notatus Rafinesque, Ichth. Ohiensis, 86, 1820, tributaries of Ohio River in Kentucky.

Genus 302. APLOCHEILUS McClelland.

Aplocheilus McClelland, Ind. Cypr. As. Res., XIX, 301, 1839 (*chrysostigmus* = *panchax*).

987. Aplocheilus dovii (Günther).

Coast of Costa Rica.

Haplochilus dovii Günther, Cat., VI, 316, 1866, Punta Arenas, Costa Rica.

var. lucerlatin Garman.

doubles = cylindraceus

Genus 303. ADINIA Girard.

Adinia Girard, Proc. Ac. Nat. Sci. Phila. 1859, 117 (*multifasciata*).

988. Adinia guatemalensis (Günther).

Guatemala, south to western Ecuador.

Fundulus guatemalensis Günther, Cat., VI, 321, 1866, Lake of Duenas, Lake Amatitlan, Rio Guacalate, and western Ecuador.

989. Adinia pachycephala (Günther).

Guatemala.

Fundulus pachycephalus Günther, Cat., VI, 321, 1866, Lake Atitlan, Guatemala.

990. Adinia dugesii (Bean).

Guanajuato, Mexico.

Fundulus dugesii Bean, Proc. U. S. Nat. Mus. 1887, 373, Guanajuato.

991. Adinia multifasciata Girard.

Gulf Coast, western Florida to Texas.

Adinia multifasciata Girard, Proc. Ac. Nat. Sci. Phila. 1859, 11, Galveston, St. Joseph Island, and Indianola, Texas.

Genus 304. RIVULUS Poey.

Rivulus Poey, Memorias de Cuba, II, 307, 1860 (*cylindraceus*).

992. Rivulus cylindraceus Poey.

Havana, Cuba.

Rivulus cylindraceus Poey, Memorias, II, 308, 1860, stream at Mordazo, near Havana, Cuba.

993. Rivulus marmoratus Poey.

Cuba.

Rivulus marmoratus Poey, Anales de Hist. Nat. España, IX, 1880, 248, Cuba.

994. Rivulus isthmensis Garman.

Costa Rica.

Rivulus isthmensis Garman, Cyprinodonts, 140, 1895, Rio San Jose, Costa Rica.

Genus 305. LUCANIA Girard.

Lucania Girard, Proc. Ac. Nat. Sci. Phila. 1859, 118 (*venusta*); not *Lucanus*, a genus of beetles.

995. Lucania ommata (Jordan).

Florida; Indian River; Santa Fe River, Florida, and its tributaries.

Heterandria ommata Jordan, Proc. U. S. Nat. Mus. 1881, 323, Indian River, Florida.

996. Lucania venusta (Girard).

Gulf of Mexico; Pensacola; mouth of the Rio Grande.

Limia venusta Girard, U. S. Mex. Bound. Surv., Ichth., 71, 1859, Indianola, Tex.

997. Lucania parva (Baird & Girard). *Rainwater-fish.*

Atlantic Coast from Connecticut to Key West.

Cyprinodon parvus Baird & Girard, Ninth Smithson. Rept. 1855, 345, Long Island.

Genus 306. GIRARDINICHTHYS Bleeker.

Girardinichthys Bleeker, Cyprin., 481, 1860 (*innominatus*).

998. Girardinichthys innominatus Bleeker.

City of Mexico.

Girardinichthys innominatus Bleeker, Cyprin., 484, 1860; after Girard.

Genus 307. EMPETRICHTHYS Gilbert.

Empetrichthys Gilbert, Death Valley Exped., Fishes, 233, 1893 (*merriami*).

999. Empetrichthys merriami Gilbert.

Death Valley in eastern California.

Empetrichthys merriami Gilbert, Fishes of Death Valley Expedition, in North American Fauna No. 7, 234, May 31, 1893, Ash Meadows, Amargosa Desert, on boundary between California and Nevada.

Genus 308. CHARACODON Günther.

Characodon Günther, Cat., VI, 308, 1866 (*lateralis*).

1000. Characodon lateralis Günther.

Central America.

Characodon lateralis Günther, Cat., VI, 308, 1866, Central America.

1001. Characodon bilineatus Bean.

Rio Lerma, Guanajuato.

Characodon bilineatus Bean, Proc. U. S. Nat. Mus. 1887, 371, Guanajuato.

1002. Characodon variatus Bean.

Tributaries of Rio Lerma, about Guanajuato and Mexico.

Characodon variatus Bean, Proc. U. S. Nat. Mus. 1887, 370, Guanajuato.

1003. Characodon luitpoldi Steindachner.

Lake Pátzcuaro, Mexico.

Characodon luitpoldi Steindachner, Anzeiger der kais. Akad. Wissench. 1894, 147, Lake Pátzcuaro, Mexico.

1004. Characodon furcidens Jordan & Gilbert.

Cape San Lucas southward to Colima, Mexico.

Characodon furcidens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 354, Cape San Lucas, Lower California.

1005. Characodon eiseni Rutter.

Tepic, Mexico.

Characodon eiseni Rutter, Proc. Cal. Ac. Sci. 1896, 265, Tepic, Jalisco, Mexico.

Genus 309. CYPRINODON Lacépède.

Cyprinodon Lacépède, Hist. Nat. Poiss., V, 486, 1803 (*variegatus*).

1006. Cyprinodon variegatus Lacépède. *Sheepshead Minnow.*

Cape Cod to the Rio Grande.

Cyprinodon variegatus Lacépède, Hist. Nat. Poiss., V, 486, 1803, South Carolina.

1006a. Cyprinodon variegatus riverendi (Poey).

Cuba and Florida Keys; Key West.

Trifarcius riverendi Poey, Memorias, II, 306, 1860, Havana.

1007. Cyprinodon eximius Girard.

Chihuahua, Mexico.

Cyprinodon eximius Girard, Proc. Ac. Nat. Sci. Phila. 1859, 158, Chihuahua River, Mexico.

1008. Cyprinodon bovinus Baird & Girard.

Leon Springs, Texas.

Cyprinodon bovinus Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 389, Leon Springs, Texas.

1009. Cyprinodon macularius Baird & Girard.

Southern Nevada to Sonora; Ash Meadows, Nevada; Medbury Springs, Amargosa Desert, California; Saratoga Spring, Death Valley.

Cyprinodon macularius Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 389, Rio San Pedro.

Chamaeodon garmani. Parras. Coahuila. (new?)

1010. Cyprinodon baileyi (Gilbert).
Pahranagat Valley, Nevada.
Cyprinodon macularius baileyi Gilbert, Death Valley Exped., 233, 1893, Pahranagat Valley, Nevada.

1011. Cyprinodon elegans Baird & Girard.
Rio Grande; Rio de los Conchos, Chihuahua.
Cyprinodon elegans Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 389, Comanche Spring, Texas.

1012. Cyprinodon martæ Steindachner.
Santa Marta, coast of Colombia, South America.
Cyprinodon martæ Steindachner, Ichth. Beitr., IV, 61, 1875, Santa Marta, Caribbean Sea.

1013. Cyprinodon carpio Günther.
Coasts of Florida.
Cyprinodon carpio Günther, Cat., VI, 306, 1866, America, locality unknown.

1014. Cyprinodon felicianus (Poey).
Cuba.
Trifarcius felicianus Poey, Synopsis, 412, 1867, Havana.

1015. Cyprinodon latifasciatus Garman.
Parras, Coahuila, Mexico.
Cyprinodon latifasciatus Garman, Bull. Mus. Comp. Zool., VIII, No. 3, 92, 1881, Parras, Mexico.

Genus 310. JORDANELLA Goode & Bean.
Jordanella Goode & Bean, Proc. U. S. Nat. Mus., II, 1879, 177 (*floridæ*).

1016. Jordanella floridæ Goode & Bean.
Florida, in San Sebastian, St. Johns, Alligator, Withlacoochee, Hillsboro, Pease, and Myakka rivers; also in Lakes Monroe, Jessup, and Tohopekaliga, Florida.
Jordanella floridæ Goode & Bean, Proc. U. S. Nat. Mus., II, 1879, 117, Lake Monroe, Florida.

Genus 311. PSEUDOXIPHOPHORUS Bleeker.
Pseudoxiphophorus Bleeker, Ichthyol. Ind. Prodr. Cypr., 483, 1860 (*bimaculatus*).

1017. Pseudoxiphophorus bimaculatus (Heckel).
Central Mexico; Rio Blanco, Orizaba.
Xiphophorus bimaculatus Heckel, Sitzungsber. Akad. Wiss. Wien 1848, 169, Mexico.

Genus 312. GAMBUSIA Poey.
Gambusia Poey, Memorias de Cuba, I, 382, 1855 (*punctata*).

1018. Gambusia punctata Poey. *Guajacon.*
Cuba; Rio Almendares.
Gambusia punctata Poey, Memorias, I, 384, 1855, Cuba.

1019. Gambusia puncticulata Poey.
Cuba.
Gambusia puncticulata Poey, Memorias, I, 386, 1855, Cuba.

1020. Gambusia infans Woolman.
Rio Lerma, Salamanca, Mexico.
Gambusia infans Woolman, Bull. U. S. Fish Com. 1894, 62, Rio Lerma, Salamanca, Mexico.

1021. Gambusia affinis (Baird & Girard). *Top Minnow.*
South Atlantic and Gulf coasts, Delaware to Mexico, and northward to southern Illinois.
Heterandria affinis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 390, Rio Medina and Rio Salado, Texas.

1022. Gambusia nobilis (Baird & Girard).
Southern Illinois to the Rio Grande region; Chihuahua River.
Heterandria nobilis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 390, Leona and Comanche Springs, Texas; Rio Grande del Norte.

1023. Gambusia nicaraguensis Günther.
Lakes of Nicaragua.
Gambusia nicaraguensis Günther, Cat., VI, 336, 1866, lakes of Nicaragua.

1024. Gambusia gracilis (Heckel).
Orizaba, Mexico.
Xiphophorus gracilis Heckel, Sitzungsber. Akad. Wiss. Wien, I, 1848, 300, Orizaba, Mexico.

1025. Gambusia episcopi Steindachner.
Isthmus of Panama at Obispo Station.
Gambusia episcopi Steindachner, Ichth. Beitr., VI, 9, 1878, Obispo, near Panama.

1026. Gambusia melapleura (Gosse).
Streams of Jamaica.
Pœcilia melapleura Gosse, Sojourn Jamaica, 84, pl. 1, fig. 3, 1851, Jamaica.

1027. Gambusia tridentiger Garman.
Isthmus of Panama in fresh water.
Gambusia tridentiger Garman, Cyprinodonts, 89, pl. 4, fig. 10, 1895, Panama.

Genus 313. BELONESOX Kner.
Belonesox Kner, Sitzungsber. Akad. Wiss. Wien 1860, XL, 419 (*belizanus*).

1028. Belonesox belizanus Kner.
Southern Mexico, Honduras, and Guatemala.
Belonesox belizanus Kner, Sitzungsber. Akad. Wiss. Wien 1860, 419, with figure, Balize.

Genus 314. ANABLEPS (Artedi) Bloch.
Anableps (Artedi) Bloch, Ichthyologia, VIII, 7, 1795 (*tetrophthalmus* = *anableps*).

1029. Anableps dovii Gill.
Central America, from Chiapas to the Isthmus of Panama.
Anableps dovii Gill, Proc. Ac. Nat. Sci. Phila. 1861, 4, Panama.

Genus 315. GOODEA Jordan.
Goodea Jordan, Proc. U. S. Nat. Mus. 1879, 299 (*atripinnis*).

1030. Goodea atripinnis Jordan.
Guanajuato, Mexico.
Goodea atripinnis Jordan, Proc. U. S. Nat. Mus. 1879, 299, Leon in Guanajuato.

Genus 316. PLATYPŒCILUS Günther.
Platypœcilus Günther, Cat., VI, 350, 1866 (*maculatus*).

1031. Platypœcilus maculatus Günther.
Mexico.
Platypœcilus maculatus Günther, Cat., VI, 350, Mexico.

1032. Platypœcilus mentalis Gill.
Atlantic side of Isthmus of Panama.
Platypœcilus mentalis Gill, Proc. Ac. Nat. Sci. Phila. 1876, 335, Isthmus of Panama.

HETERANDRIA Agassiz.

Heteroandria formosa Ag.
omitted by accident.

Genus 317. GLARIDICHTHYS Garman.

Glaridichthys Garman, American Naturalist, March, 1896, 232 (*uninotatus*); substitute for *Glaridodon*, preoccupied.

1033. Glaridichthys uninotatus (Poey).

Cuba.

Girardinus uninotatus Poey, Memorias, II, 309, 1860, Rio Tacotaco, Cuba.

1034. Glaridichthys latidens (Garman).

Chihuahua, Mexico.

Glaridodon latidens Garman, Cyprinodonts, 42, pl. 5, fig. 11, 1895, Chihuahua, Mexico.

Genus 318. GIRARDINUS Poey.

Girardinus Poey, Memorias, I, 383, 1855 (*metallicus*).

1035. Girardinus metallicus Poey.

Cuba.

Girardinus metallicus Poey, Mem. Cuba, I, 387, lam. 31, fig. 8–11, 1855, Cuba.

1036. Girardinus denticulatus Garman.

Streams of Cuba.

Girardinus denticulatus Garman, Cyprinodonts, 47, 1895, Remedios, Cuba.

1037. Girardinus creolus Garman.

Cuba.

Girardinus creolus Garman, Cyprinodonts, 47, pl. 5, fig. 9 (teeth), 1895, Cuba.

1038. Girardinus pleurospilus Günther.

Guatemala.

Girardinus pleurospilus Günther, Cat., VI, 353, 1866, Lake of Duenas.

Genus 319. PŒCILIA Bloch & Schneider.

Pœcilia Bloch & Schneider, Syst. Ichthyologia, 452, 1801 (*vivipara*).

1039. Pœcilia versicolor (Günther).

San Domingo.

Girardinus versicolor Günther, Cat., VI, 352, 1866, San Domingo.

1040. Pœcilia occidentalis (Baird & Girard).

Gila Basin, Arizona; Yaqui River, Sonora; Tucson, Arizona.

Heterandria occidentalis Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 390, Rio Santa Cruz, near Tucson, Arizona.

1041. Pœcilia pœciloides (De Filippi).

Barbados.

Lebistes pœciloides De Filippi, Arch. Zool. Anat., I, 1862, 69, Barbados.

1042. Pœcilia vivipara Bloch & Schneider.

Brazil; Guiana; Martinique.

Pœcilia vivipara Bloch & Schneider, Syst. Ichthyol., 452, 1801, tab. 86, fig. 2, Surinam.

1043. Pœcilia butleri Jordan.

Rio Presidio, near Mazatlan, Mexico.

Pœcilia butleri Jordan, Proc. U. S. Nat. Mus. 1888, 330, Rio Presidio, Mazatlan.

1044. Pœcilia gillii (Kner & Steindachner).

Rio Chagres, Panama.

Xiphophorus gillii Kner & Steindachner, Abh. Bayer. Akad. 1864, 28, 1866, Rio Chagres, Panama.

1045. Pœcilia vittata Guichenot. *Fanguito; Guajica.*

Cuba.

Pœcilia vittata Guichenot, in Ramon de la Sagra, Hist. Nat. Cuba, Poiss., 146, 1850, Cuba.

1046. Pœcilia mexicana Steindachner.

Southern Mexico and Central America; Chiapas; Duenas, and Vera Paz.

Pœcilia mexicana Steindachner, Sitzungsber. Akad. Wiss. Wien 1863, 178, *southern Mexico.*

1047. Pœcilia thermalis Steindachner.
Warm Springs, etc., in Central America.
Pœcilia thermalis Steindachner, Sitzungsber. Akad. Wiss. Wien 1863, 181, Warm Springs, in Central America.

1048. Pœcilia chisoyensis Günther.
Rio Chisoy, Vera Paz.
Pœcilia chisoyensis Günther, Cat., VI, 342, Rio Chisoy.

1049. Pœcilia petenensis Günther.
Lake Peten, Yucatan.
Pœcilia petenensis Günther, Cat., VI, 342, 1866, Lake Peten, Yucatan.

1050. Pœcilia sphenops Cuvier & Valenciennes.
Vera Cruz, Mexico.
Pœcilia sphenops Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 130, 1846, Vera Cruz, Mexico.

1051. Pœcilia dovii Günther.
Mexico and Guatemala.
Pœcilia dovii Günther, Cat., VI, 344, 1866, Lake Nicaragua; Lake Amatitlan.

1052. Pœcilia couchiana (Girard).
Rio San Juan at Cadereita and Monterey, and Nuevo Leon, Mexico.
Limia couchiana Girard, Proc. Ac. Nat. Sci. Phila. 1859, 116, Rio San Juan, Mexico.

1053. Pœcilia boucardi Steindachner.
Colon.
Pœcilia boucardi Steindachner, Ichth. Beitr., VI, 8, 1878, Colon or Aspinwall.

1054. Pœcilia reticulata Peters.
Brooks on the island of Curaçao, Caribbean Sea and adjacent coast.
Pœcilia reticulata Peters, Berliner Monatsber. for 1859 (1860), 412, Rio Guayra, Caracas.

1055. Pœcilia dominicensis Cuvier & Valenciennes.
San Domingo and Barbados.
Pœcilia dominicensis Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 131, pl. 525, 1846, San Domingo.

1056. Pœcilia spilurus Günther.
Central America.
Pœcilia spilurus Günther, Cat., VI, 345, 1866, Central America.

1057. Pœcilia elongata Günther.
Panama.
Pœcilia elongata Günther, Cat., VI, 342, 1866, Panama.

1058. Pœcilia presidionis Jordan & Culver.
Rio Presidio, Sinaloa, Mexico.
Pœcilia presidio Jordan & Culver, in Jordan, Fishes of Sinaloa, 413, pl. 29, 1895, Rio Presidio, Sinaloa, Mexico.

Genus 320. MOLLIENISIA Le Sueur.
Mollienisia Le Sueur, Jour. Ac. Nat. Sci. Phila., II, 1821, 3 (*latipinna*).

1059. Mollienisia jonesi Günther.
Lake Alcohuaca, Huamantla, Mexico.
Mollienesia jonesi Günther, Ann. Mag. Nat. Hist., XIV, 1874, 370, Huamantla.

1060. Mollienisia formosa (Girard).
Palo Alto, Mexico.
Limia formosa Girard, Proc. Ac. Nat. Sci. Phila. 1859, 115, Palo Alto, Mexico

1061. Mollienisia latipinna LeSueur.
South Carolina to northern Mexico.
Mollienisia latipinna LeSueur, Jour. Ac. Nat. Sci. Phila., II, 1821, 3, New Orleans.

Poecilia cuneata Garman.
Turbo, Panama.

? Poecilia melanogastra.

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1062. Mollienisia petenensis Günther.
Lake Peten, Guatemala.
Mollienesia petenensis Günther, Cat., VI, 348, 1866, Lake Peten, Guatemala.

Genus 321. XIPHOPHORUS Heckel.
Xiphophorus Heckel, Sitzb. Akad. Wiss. Wien 1848, I, pl. 3, 163 (*helleri*).

1063. Xiphophorus helleri Heckel.
Rivers of southern Mexico and Central America.
Xiphophorus helleri Heckel, Sitzb. Akad. Wiss. Wien I, 1848, 163, Rio Chisoy.

1064. Xiphophorus guntheri Jordan & Evermann.
Rio Chisoy, basin of Rio Usumacinta, Guatemala.
Xiphophorus guntheri Jordan & Evermann, Fishes North and Middle America, 702, 1896, Rio Chisoy, Guatemala.

Family XCIII. AMBLYOPSIDÆ. The Blind Fishes.

Genus 322. CHOLOGASTER Agassiz.
Chologaster Agassiz, Am. Jour. Sci. Arts, XVI, 1853, 135 (*cornutus*).

1065. Chologaster cornutus Agassiz. *Fish of the Dismal Swamp.*
Southern States; from the Dismal Swamp to the Okefinokee Swamp.
Chologaster cornutus Agassiz, Am. Jour. Sci. Arts 1853, 135, ditch in a rice field at Waccamaw, South Carolina.

1066. Chologaster agassizii Putnam.
Tennessee and Kentucky.
Chologaster agassizii Putnam, Am. Nat. 1872, 30, fig., from a well at Lebanon, Tennessee.

1067. Chologaster papilliferus Forbes.
Cave spring, Union County, Illinois.
Chologaster papilliferus Forbes, Am. Nat., January, 1882, 1, cave spring in Union County, southern Illinois.

Genus 323. TYPHLICHTHYS Girard.
Typhlichthys Girard, Proc. Ac. Nat. Sci. Phila. 1859, 62 (*subterraneus*).

1068. Typhlichthys subterraneus Girard. *Small Blindfish.*
Subterranean streams in limestone regions of Kentucky, Tennessee, Missouri, and Alabama.
Typhlichthys subterraneus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 62, well at Bowling Green, Kentucky.

Genus 324. AMBLYOPSIS DeKay.
Amblyopsis DeKay, New York Fauna: Fishes, 187, 1842 (*spelæus*).

1069. Amblyopsis spelæus DeKay. *Mammoth Cave Blindfish.*
Subterranean streams of the limestone regions of Kentucky and Indiana; River Styx, Mammoth Cave.
Amblyopsis spelæus DeKay, New York Fauna: Fishes, 187, 1842, Mammoth Cave, Kentucky.

Order Y. SYNENTOGNATHI. The Synentognathous Fishes.

Family XCIV. ESOCIDÆ. The Needle-Fishes.

Genus 325. TYLOSURUS Cocco.
Tylosurus Cocco, "Lettere in Giornale Sci. Sicilia, XVII," 18, 1829 (*cantraini* = *imperialis* = *acus*).

1070. Tylosurus notatus (Poey). *Needle-fish; Long-jaws.*
West Indies, north to Pensacola, common about Key West.
Belone notata Poey, Memorias, II, 293, 1860, Havana.

1071. Tylosurus scapularis Jordan & Gilbert.
Panama.
Tylosurus scapularis Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 307, Panama.

1072. Tylosurus timucu (Walbaum). *Timucu; Peixe Agulka.*
Florida Keys to Brazil.
Esox timucu Walbaum, Artedi Pisc., III, 88, 1792, Brazil; after *Timucu* of Marcgrave.

1073. Tylosurus euryops Bean & Dresel. *Long-jaw.*
Cuba and Jamaica.
Tylosurus euryops Bean & Dresel, Proc. U. S. Nat. Mus. 1884, 168, Jamaica.

1074. Tylosurus diplotænia (Cope).
St. Martins Island, West Indies.
Belone diplotænia Cope, Trans. Am. Philos. Soc. 1871, 481, St. Martins.

1075. Tylosurus microps (Günther).
Coast of Guiana.
Belone microps Günther, Cat., VI, 237, 1866, Surinam, British Guiana.

1076. Tylosurus angusticeps (Günther).
Coast of Ecuador.
Belone angusticeps Günther, Cat., VI, 238, 1866, Ecuador.

1077. Tylosurus ardeola (Cuvier & Valenciennes)
West Indies.
Belone ardeola Cuvier & Valenciennes, Hist. Nat. Poiss., 425, 1846, Martinique.

1078. Tylosurus stolzmanni (Steindachner).
Pacific Coast of America from Guaymas and Mazatlan to Peru.
Belone stolzmanni Steindachner, Ichth. Beitr., VII, 21, 1878, Tumbez, Peru.

1079. Tylosurus exilis (Girard). *Needle-fish.*
Coast of southern California, from Point Conception southward to Cerros Island.
Belone exilis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 149, San Diego.

1080. Tylosurus marinus (Walbaum). *Garfish; Billfish; Needle-fish; Agujon.*
Coast of Maine to Texas; Atlantic and Gulf coasts.
Esox marinus Walbaum, Artedi Piscium, III, 88, 1792; after Schöpf.

1081. Tylosurus almeida (Quoy & Gaimard). *Timucu.*
Surinam to Rio Janeiro and northward in the West Indies.
Belone almeida Quoy & Gaimard, Voyage de l'Uranie, Zool., 226, 1824, Brazil.

1082. Tylosurus fodiator Jordan & Gilbert. *Agujon.*
Pacific Coast of Mexico.
Tylosurus fodiator Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 459, Mazatlan.

1083. Tylosurus raphidoma (Ranzani). *Houndfish; Aguja de Casta; Guardfish.*
West Indies, Florida Keys to Brazil; Ocean City, New Jersey.
Belone raphidoma Ranzani, Nov. Com. Ac. Nat. Sci. Inst. Bonon., V, 1842, 359, pl. 37, fig. 1, Brazil.

1084. Tylosurus galeatus (Cuvier & Valenciennes).
Cayenne, French Guiana.
Belone galeata Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 429, 1846, Cayenne, French Guiana.

1085. Tylosurus pacificus (Steindachner).
Acapulco to Panama.
Belone pacifica Steindachner, Ichth. Beitr., III, 65, 1875, Panama.

1086. Tylosurus acus (Lacépède). *Houndfish; Agujon.*
West Indies and occasionally northward.
Sphyræna acus Lacépède, Hist. Nat. Poiss., V, 6, pl. 1, fig. 3, 1803, Martinique.

acc. N. [illegible]

1087. Tylosurus caribbæus (LeSueur).
West Indies.
Belone caribbæa LeSueur, Jour. Ac. Nat. Sci. Phila., II, 1821, 127, Caribbean Sea.

Genus 326. ATHLENNES Jordan & Fordice.
Athlennes Jordan & Fordice, Proc. U. S. Nat. Mus. 1886, 342 (*hians*).

1088. Athlennes hians (Cuvier & Valenciennes).
West Indies, from Florida to Brazil; Acapulco.
Belone hians Cuvier & Valenciennes, Hist. Nat. Poiss., XVIII, 432, 1846, Havana; Bahia.

Family XCV. HEMIRAMPHIDÆ. The Balaos.

Genus 327. CHRIODORUS Goode & Bean. *Hardheads.*
Chriodorus Goode & Bean, Proc. U. S. Nat. Mus. 1882, 432 (*atherinoides*).

1089. Chriodorus atherinoides Goode & Bean. *Hardhead.*
Florida Keys.
Chriodorus atherinoides Goode & Bean, Proc. U. S. Nat. Mus. 1882, 432, Key West, Florida.

Genus 328. HYPORHAMPHUS Gill. *Halfbeaks.*
Hyporhamphus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 131 (*tricuspidatus* = *unifasciatus.*)

1090. Hyporhamphus unifasciatus (Ranzani). *Escribano.*
Key West to Rio Janeiro; Panama; East Indies or Africa.
Hemiramphus unifasciatus Ranzani, Nov. Comn. Ac. Sci. Bonon., V, 1842, 326, Brazil.

1091. Hyporhamphus roberti (Cuvier & Valenciennes). *Common Halfbeak; Pajarito.*
Coasts of America; Newport, Rhode Island; Longport and Beesley Point, New Jersey; Fortress Monroe, Virginia; Beaufort, North Carolina; Charleston; Pensacola; San Sebastian River; Cedar Keys; New Orleans; Mazatlan; Guaymas; Cape San Lucas; La Paz; Panama; Chatham and Indefatigable Islands of the Galapagos.
Hemirhamphus roberti Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 24, 1846, Cayenne.

1092. Hyporhamphus rosæ (Jordan & Gilbert).
Southern California and southward.
Hemiramphus rosæ Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 335, San Diego, California.

Genus 329. HEMIRAMPHUS Cuvier.
Hemiramphus Cuvier, Règne Animal, ed. I, II, 1817 (*brasiliensis*).

1093. Hemiramphus brasiliensis (Linnæus). *Balaó; Escribano.*
West Indies; Key West southward to Bahia.
Esox brasiliensis Linnæus, Syst. Nat., ed. X, 314, 1758, Jamaica; after Browne; the *Timucu* of Marcgrave wrongly included in the synonymy; Bloch, Ichth., 391, 1801, corrected synonymy and description.

1094. Hemiramphus balao LeSueur. *Balaó; Piper.*
West. Cuba; also known from Panama.
Indies *Hemirhamphus balao* LeSueur, Jour. Ac. Nat. Sci. Phila., II, 1823, 136, Lesser Antilles.

Genus 330. EULEPTORHAMPHUS Gill.
Euleptorhamphus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 131 (*brevoorti*).

1095. Euleptorhamphus velox Poey.
West Indies northward in the Gulf Stream to Massachusetts.
Euleptorhamphus velox Poey, Synopsis, 383, 1867, Cuba.

Family XCVI. SCOMBERESOCIDÆ. The Sauries.

Genus 331. SCOMBERESOX Lacépède. *Sauries.*

Scomberesox Lacépède, Hist. Nat. Poiss., v, 344, 1803 (*camperii*).

1096. Scomberesox saurus (Walbaum). *Saury; Skipper; Billfish.*

Atlantic Ocean, north of Cape Cod and France.

Esox saurus Walbaum, Artedi Pisc., III, 93, 1792, Cornwall; after the *Saury Pike* of Pennant.

Genus 332. COLOLABIS Gill.

Cololabis Gill, Proc. U. S. Nat. Mus. 1896, 176 (*brevirostris*).

1097. Cololabis brevirostris (Peters).

Coast of California; Tomales Bay and San Francisco.

Scombresox brevirostris Peters, Monatsberichte Akad. Wiss. Berl., July, 1866, 521, Tomales Bay, California.

Family XCVII. EXOCŒTIDÆ. The Flying-Fishes.

Genus 333. FODIATOR Jordan & Meek.

Fodiator Jordan & Meek, Proc. U. S. Nat. Mus. 1885, 45 (*acutus*).

1098. Fodiator acutus (Cuvier & Valenciennes). *Sharp-nosed Flying-fish.*

Both shores of Tropical America; Gulf of California; San Luis Gonzales; Panama; Nice.

Exocœtus acutus Cuvier & Valenciennes, Hist. Nat. Poiss., 125, 1849, Surinam; Nice.

Genus 334. PAREXOCŒTUS Bleeker.

Parexocœtus Bleeker, Nederl. Tydskr. Dierk., III, 105, 1865 (*mento*).

1099. Parexocœtus mesogaster (Bloch).

Tropical seas; East Indies and West Indies; Hawaiian Islands; Newport, Rhode Island; Carolina coast.

Exocœtus mesogaster Bloch, Ichth., pl. 399, 1795, Martinique; on a drawing by Plumier, in which the pectorals and ventrals are much too long.

Genus 335. EXOCŒTUS (Artedi) Linnæus. *Flying-fishes.*

Exocœtus Artedi (Genera Piscium, 6, 1738); Linnæus, Syst. Nat., ed. x, 316, 1758 (*volitans*).

1100. Exocœtus volitans Linnæus.

Warm seas; Newfoundland; England; Hawaiian Islands. Japan

Exocœtus volitans Linnæus, Syst. Nat., ed. x, 316, 1758.

Genus 336. EXONAUTES Jordan & Evermann.

Exonautes, new genus (*exsiliens*).

1101. Exonautes exsiliens (P. L. S. Müller).

Open seas.

Exocœtus exsiliens Philip Ludwig Statius Müller, Nuremberg ed. Linnæus Syst. Nat., 209, 1776, Carolina.

1102. Exonautes rondeletii (Cuvier & Valenciennes).

Tropical seas; Florida; France; Acapulco; West Indies; southern Europe.

Exocœtus rondeletii Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 115, 1846, Naples; Sicily; Canaries.

1103. Exonautes vinciguerræ (Jordan & Meek).

Open Atlantic; southern Europe; Newfoundland; St. Martins; Gulf of Mexico.

Exocœtus vinciguerræ Jordan & Meek, Proc. U. S. Nat. Mus. 1885, 56, open sea off Newfoundland, 46° N., 61° W.

Epocochus Cholubi. Stand. in
Collett, Hermbelle. P23.
Ex obtuvimus
Coll. Nicholson. Miami Fla.
copia July 20. 1922. (as H. Cole

NONITOR.

Econanulés affinis may be distinct

Gorca

β subgenus Eoplanus.

1104. Exonautes speculiger (Cuvier & Valenciennes).
Open seas; Atlantic Coast; Grand Banks; southern Europe; Hawaiian Islands.
Exocœtus speculiger Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 93, 1846, Friendly Islands, etc.

1105. Exonautes rufipinnis (Cuvier & Valenciennes).
Tropical America; Payta; Panama; Tobasco; Barbados.
Exocœtus rufipinnis Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 99, 1846, Payta, Peru.

Genus 337. CYPSILURUS Swainson.
Cypsilurus Swainson, Class. Fishes, etc., II, 296, 1839 (*nuttalli*).

1106. Cypsilurus heterurus (Rafinesque).
Atlantic Ocean; Newfoundland; England.
Exocœtus heterurus Rafinesque, Caratteri di Alcuni Nuovi Generi, etc., 58, 1810, Palermo.

1107. Cypsilurus lutkeni (Jordan & Evermann).
Cape San Antonio.
Exocœtus lutkeni Jordan & Evermann, Fishes North and Middle America, 736, 1896, Cape San Antonio.

1108. Cypsilurus furcatus (Mitchill).
Warm seas; north to Cape Cod and to the Mediterranean.
Exocœtus furcatus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 149, New York.

1109. Cypsilurus nigricans (Bennett).
Tropical seas; north to Cuba, Central America, and France.
Exocœtus nigricans Bennett, Whaling Voyage, II, 287, 1840, taken in both the Atlantic and Pacific oceans, in latitude 5° N.

1110. Cypsilurus xenopterus (Gilbert).
Clarion Island, one of the Revillagigedo Islands.
Exocœtus xenopterus Gilbert, Proc. U. S. Nat. Mus. 1890, 58, Clarion Island.

1111. Cypsilurus lineatus (Cuvier & Valenciennes).
Tropical Atlantic; Korea; the Canaries; Madeira and Bermuda.
Exocœtus lineatus Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 92, 1836, Korea; Canaries.

1112. Cypsilurus cyanopterus (Cuvier & Valenciennes).
Coasts of Brazil and Caribbean Sea.
Exocœtus cyanopterus Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 98, 1846, Bahia; Rio de Janeiro.

1113. Cypsilurus bahiensis (Ranzani).
Tropical seas; north to Cuba and the Galapagos Islands.
Exocœtus bahiensis Ranzani, Nov. Com. Ac. Sci. Inst. Bonon., V, 1842, 362, pl. 38, Bahia.

1114. Cypsilurus californicus (Cooper). *Great Flying-fish; Volador.*
Southern California; Point Conception to Cape San Lucas; Santa Barbara Islands.
Exocœtus californicus Cooper, Proc. Cal. Ac. Sci., III, 1864, 93, fig. 20, Santa Catalina Island.

1115. Cypsilurus callopterus (Günther).
Panama.
Exocœtus callopterus Günther, Cat., VI, 292, 1866, Panama.

1116. Cypsilurus gibbifrons (Cuvier & Valenciennes).
Atlantic Ocean; Newport, Rhode Island.
Exocœtus gibbifrons Cuvier & Valenciennes, Hist. Nat. Poiss., XIX, 118, 1846, Atlantic.

Order Z. HEMIBRANCHII. The Hemibranchs.

Family XCVIII. GASTEROSTEIDÆ. The Sticklebacks.

Genus 338. EUCALIA Jordan.

Eucalia Jordan, Man. Vert., ed. I, 248, 1876 (*inconstans*).

1117. Eucalia inconstans (Kirtland). *Brook Stickleback.*

New York to Kansas and northward to the Saskatchewan; Great Lakes region; central Ohio and Illinois.

Gasterosteus inconstans Kirtland, Bost. Jour. Nat. Hist., III, 1841, 273, Trumbull County, Ohio.

1117a. Eucalia inconstans cayuga Jordan.

Ithaca and Syracuse, New York.

Eucalia inconstans cayuga Jordan, Man. Vert., ed. I, 249, 1876, Cayuga Lake, Ithaca, New York.

1117b. Eucalia inconstans pygmæa (Agassiz).

Lake Superior.

Gasterosteus pygmæus Agassiz, Lake Superior, 314, 1850, Lake Superior.

Genus 339. PYGOSTEUS Brevoort.

Pygosteus Brevoort, in Gill, Cat. Fish. East Coast N. A., 39, 1861, name only.

1118. Pygosteus pungitius (Linnæus). *Nine-spined Stickleback.*

Northern Europe; Atlantic coasts of America; Long Island to the Arctic Sea; tributaries of the Great Lakes.

Gasterosteus pungitius Linnæus, Syst. Nat., ed. X, 1758, 296; after *Gasterosteus aculeis decem* Artedi.

1118a. Pygosteus pungitius brachypoda (Bean).

Mountain lakes and streams about Baffin Bay.

Gasterosteus pungitius brachypoda Bean, Bull. U. S. Nat. Mus., XV, 1879, 129, Oosoodlib, Baffin Bay.

Genus 340. GASTEROSTEUS (Artedi) Linnæus. *Sticklebacks.*

Gasterosteus (Artedi) Linnæus, Syst. Nat., X, 489, 1758 (*aculeatus*).

1119. Gasterosteus aculeatus Linnæus. *European Stickleback; Burnstickle.*

Coasts and streams of northern Europe; Greenland.

Gasterosteus aculeatus Linnæus, Syst. Nat., ed. X, I, 489, 1758, Europe.

1120. Gasterosteus bispinosus Walbaum. *Common Eastern Stickleback.*

Labrador to New Jersey; New England.

Gasterosteus bispinosus Walbaum, Artedi, Pisc., 450, 1792, after Pennant; said to be "New York," but more likely Hudson Bay.

1120a. Gasterosteus bispinosus atkinsi Bean.

Quebec; Maine.

Gasterosteus atkinsi Bean, Proc. U. S. Nat. Mus. 1879, 67, Schoodic Lakes, Maine.

1120b. Gasterosteus bispinosus cuvieri Girard.

East coast of North America from Labrador to Massachusetts.

Gasterosteus cuvieri Girard, in Storer's Fishes of Nova Scotia and Labrador, 254, pl. 7, fig. 1, 1849, Bras d'Or, Red Bay, Labrador.

1121. Gasterosteus gladiunculus Kendall.

Off coast of Maine, in floating fucus and other seaweed.

Gasterosteus gladiunculus Kendall, Proc. U. S. Nat. Mus., XVIII, 1896, 623, off coast of Maine, near Seguin Island.

1122. Gasterosteus cataphractus (Pallas). *Alaska Stickleback; Salmon-killer.*

San Francisco to Alaska and Kamchatka.

Gasteracanthus cataphractus Pallas, Mém. Acad. Petersb., III, 325, 1811, Kamchatka.

These species cannot be maintained as such.
Regan thinks all are one.

G. santae-Annae Regan
Santa Ana R. Cal. [illegible]

1123. Gasterosteus williamsoni Girard.

Streams of southern California from Ventura County to Santa Ana River; Williamson Pass near Saugus, Ventura County; San Bernardino; and Santa Ana River at Colton.

Gasterosteus williamsoni Girard, Proc. Ac. Nat. Sci. Phila. 1854, 133, Williamson Pass, California.

1123a. Gasterosteus williamsoni microcephalus (Girard). *California Stickleback.*

Pacific Coast of the United States in streams and brackish water; Alaska to Todos Santos, Lower California.

Gasterosteus microcephalus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 133, Four Creeks (Kaweah River), tributary to Tule Lake (Tulare Lake), San Joaquin Valley, California.

Genus 341. APELTES DeKay.

Apeltes DeKay, New York Fauna: Fishes, 67, 1842 (*quadracus*).

1124. Apeltes quadracus (Mitchill).

Maine to New Jersey in salt water.

Gasterosteus quadracus Mitchill, Trans. Lit. and Phil. Soc., I, 1815, 430, New York.

Family XCIX. AULORHYNCHIDÆ.

Genus 342. AULORHYNCHUS Gill.

Aulorhynchus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 169 (*flavidus*).

1125. Aulorhynchus flavidus Gill.

Coast of California from San Nicolas Island and Monterey northward to Sitka, Alaska.

Aulorhynchus flavidus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 169, coast of Washington.

Family C. AULOSTOMIDÆ. The Trumpet-Fishes.

Genus 343. AULOSTOMUS Lacépède.

Aulostomus Lacépède, Hist. Nat. Poiss., v, 357, 1803 (*chinensis*).

1126. Aulostomus maculatus Valenciennes. *Trompetero.*

Caribbean Sea, north to southern Florida.

Aulostoma maculatum Valenciennes, in Cuvier, Illust. Poiss., pl. 92, fig. 2, about 1845.

1127. Aulostomus cinereus Poey

Cuba.

Aulostoma cinereum Poey, Synopsis, 386, 1867, Cuba.

Family CI. FISTULARIIDÆ. The Cornet-Fishes.

Genus 344. FISTULARIA Linnæus.

Fistularia Linnæus, Syst. Nat., ed. x, 312, 1758 (*tabacaria*).

1128. Fistularia tabacaria Linnæus. *Trumpet-fish; Trompetero.*

West Indies and neighboring seas; northward to Carolina and Florida, and occasionally to Long Island.

Fistularia tabacaria Linnæus, Syst. Nat., ed. x, 312, 1758, Tropical America.

1129. Fistularia depressa Günther. *Corneta.*

East Indies, Australia, China, Panama, and Lower California.

Fistularia depressa Günther, Report on the Shore Fishes, Challenger Report, 69, pl. 32, Fig. D, 1880.

1130. Fistularia petimba Lacépède.

Western Pacific; Bermudas; Cuba.

Fistularia petimba Lacépède, Hist. Nat. Poiss., v, 349, 1803, New Britain, Isle of Reunion, equatorial Pacific.

Family CII. MACRORHAMPHOSIDÆ. The Snipe-Fishes.

Genus 345. MACRORHAMPHOSUS Lacépède. *Snipe-fishes.*

Macrorhamphosus Lacépède, Hist. Nat. Poiss., v, 136, 1803 (*cornutus* = *scolopax*).

1131. Macrorhamphosus scolopax (Linnæus). *Snipe-fish; Trumpet-fish; Bellows-fish.*

Mediterranean Sea; northward to southern England; accidental on our North Atlantic Coast.

Balistes scolopax Linnæus, Syst. Nat., ed. x, 329, 1758, Mediterranean.

Order AA. LOPHOBRANCHII. The Lophobranchs.

Suborder SYNGNATHI.

Family CIII. SYNGNATHIDÆ. The Pipefishes.

Genus 346. SIPHOSTOMA Rafinesque.

Siphostoma Rafinesque, Caratteri Nuovi Generi, 18, 1810 (*pelagicus*).

Subgenus DERMATOSTETHUS Gill.

Dermatostethus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 283 (*punctipinnis*).

1132. Siphostoma punctipinne (Gill).

San Diego, California.

Dermatostethus punctipinnis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 283. San Diego, California.

Subgenus SIPHOSTOMA Rafinesque.

1133. Siphostoma carinatum Gilbert.

Gulf of California.

Siphostoma carinatum Gilbert, Proc. U. S. Nat. Mus. 1891, 547, Gulf of California, 31° 31′ N., 114° 19′ W., at Albatross Stations 3027 and 3028.

1134. Siphostoma californiense (Storer).

Santa Barbara and Monterey; from Santa Barbara northward.

Syngnathus californiensis Storer, Proc. Bost. Soc. Nat. Hist., II, 1845, 73, California.

1135. Siphostoma griseolineatum (Ayres).

Pacific Coast of the United States, from Puget Sound to Monterey.

Syngnathus griseolineatus Ayres, Proc. Cal. Ac. Sci. 1854, 14, San Francisco Bay.

1136. Siphostoma leptorhynchum (Girard).

West coast of America from San Francisco to San Diego.

Syngnathus leptorhynchus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 156, San Diego, California.

1137. Siphostoma fistulatum (Peters).

Puerto Cabello, near Aspinwall.

Syngnathus fistulatus Peters, Monatsber. Ak. Wiss. Berk., 456, 1868, Puerto Cabello, near Aspinwall.

1138. Siphostoma barbaræ Swain.

California coast, at Santa Barbara.

Siphostoma barbaræ Swain, Proc. U. S. Nat. Mus. 1884, 238, Santa Barbara, California.

1139. Siphostoma mackayi Swain & Meek.

Key West, Florida, and south to Yucatan.

Siphostoma mackayi Swain & Meek, Proc. U. S. Nat. Mus. 1884, 239, Key West, Florida.

1143. European: doubtfully
American.

1140. Siphostoma floridæ Jordan & Gilbert.
Beaufort, North Carolina, to Corpus Christi, Texas.
Siphostoma floridæ Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 263, Pensacola, Florida.

1141. Siphostoma poeyi Jordan & Evermann.
Havana.
Siphostoma poeyi Jordan & Evermann, Fishes North and Middle America, 766, 1896, Havana, Cuba.

1142. Siphostoma auliscus Swain.
Southern California.
Siphostoma auliscus Swain, Proc. U. S. Nat. Mus. 1882, 310, Santa Barbara and San Diego, California.

1143. Siphostoma pelagicum (Osbeck).
Tropical parts of the Atlantic; north to the West Indies and the Mediterranean.
Syngnathus pelagicus Osbeck, Dagbök Resa Ostind., 305, 1757, open sea in floating seaweed.

1144. Siphostoma rousseau (Kaup).
West Indies; known from Jamaica, St. Lucia, and Martinique.
Syngnathus rousseau Kaup, Lophobranchii, 40, 1856, Martinique.

1145. Siphostoma elucens (Poey).
Cuba.
Syngnathus elucens Poey, Synopsis, 443, 1867, Havana, Cuba.

1146. Siphostoma jonesi (Günther).
Bermuda Islands.
Syngnathus jonesi Günther, Ann. and Mag. Nat. Hist., series 4, XIV, 1874, 8, Bermudas.

1147. Siphostoma robertsi Jordan & Rutter.
Known only from Jamaica.
Siphostoma robertsi Jordan & Rutter, Fishes of Jamaica, in Proc. Ac. Nat. Sci. Phila. 1896, Jamaica.

1148. Siphostoma brachycephalum (Poey).
Cuba.
Syngnathus brachycephalus Poey, Synopsis, 444, 1867, Havana, Cuba.

1149. Siphostoma affine (Günther).
Gulf of Mexico, on coast of Louisiana.
Syngnathus affinis Günther, Cat., VIII, 163, 1870, Louisiana.

1150. Siphostoma scovelli Evermann & Kendall.
Coast of Texas and both coasts of Florida.
Siphostoma scovelli Evermann & Kendall, Proc. U. S. Nat. Mus., XVIII, 1895 (1896), 109, Corpus Christi, Texas.

1151. Siphostoma bairdianum (Duméril).
West coast of Mexico, near California.
Syngnathus bairdianus Duméril, Hist. Nat. Poiss., II, 574, 1870, "Coast of Mexico, near California."

1152. Siphostoma louisianæ (Günther).
Atlantic and Gulf coasts of the United States, North Carolina to Texas and south to Key West.
Syngnathus louisianæ Günther, Cat., VIII, 160, 1870, New Orleans, Louisiana.

1153. Siphostoma fuscum (Storer). *Common Pipefish.*
Atlantic Coast of United States from Maine to Virginia.
Syngnathus fuscus Storer, Rept. Fish. Mass., 162, 1839, Nahant, Massachusetts.

1154. Siphostoma starksii Jordan & Culver.

Rio Presidio, Sinaloa, Mexico.

Siphostoma starksii Jordan & Culver, in Jordan, Fishes of Sinaloa, 116, 1895, Rio Presidio, Mazatlan, Mexico.

1155. Siphostoma arctum Jenkins & Evermann.

Gulf of California; Guaymas.

Siphostoma arctum Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 137, Bay of Guaymas, Sonora, Mexico.

1156. Siphostoma sinaloæ Jordan & Starks.

Pacific coast of Mexico.

Siphostoma sinaloæ Jordan & Starks, Proc. Cal. Ac. Sci. 1896, Mazatlan, Mexico.

1157. Siphostoma crinigerum Bean & Dresel.

Pensacola and Key West, to Abrolhos Reef, Brazil.

Siphostoma crinigerum Bean & Dresel, Proc. Biological Soc. Washington, II, 1884, 99, Pensacola, Florida.

Subgenus CORYTHROICHTHYS Kaup.

Corythroichthys Kaup, Lophobranchii, 25, 1856 (*albirostris*); not of Linnæus as restricted by Rafinesque.

1158. Siphostoma albirostre (Heckel).

West Indies; north to Pensacola and Key West; south to Bahia.

Corythroichthys albirostris Heckel, in Kaup, Lophobranchii, 25, 1856, Mexico; Bahia.

1159. Siphostoma cayennense (Sauvage).

Cayenne.

Syngnathus cayennensis Sauvage, Bull. Soc. Philom. Paris, 1882, 176, Cayenne.

Genus 347. DORYRHAMPHUS Kaup.

Doryrhamphus Kaup, Lophobranchii, 54, 1856 (*excisus*).

Subgenus DORYICHTHYS Kaup.

Doryichthys Kaup, Lophobranchii, 56, 1856 (*bilineatus*).

1160. Doryrhamphus lineatus (Valenciennes).

Tropical parts of Atlantic from Cuba to Africa.

Doryichthys lineatus Valenciennes, in Kaup, Lophobranchii, 59, 1856, Bahia, Mexico, and Guadeloupe.

Subgenus DORYRHAMPHUS Kaup.

1161. Doryrhamphus californiensis Gill.

Gulf of California.

Doryrhamphus californiensis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 284, Cape San Lucas.

Genus 348. SYNGNATHUS Linnæus.

Syngnathus Linnæus, Artedi Genera Piscium, 1738 (*acus, typhle*, etc.)

Subgenus SYNGNATHUS Linnæus.

1162. Syngnathus æquoreum Linnæus. *Ocean Pipefish.*

Northern and western coasts of Europe; open Atlantic; Gulf of Mexico.

Syngnathus æquoreus Linnæus, Syst. Nat., ed. x, 417, 1758, open sea.

Genus 349. OSPHYOLAX Cope.

Osphyolax Cope, Proc. Ac. Nat. Sci. Phila. 1875, 450 (*pellucidus*).

1163. Osphyolax pellucidus Cope.

Osphyolax pellucidus Cope, Proc. Ac. Nat. Sci. Phila. 1875, 450, pl. 25, figs. 1 to 4, open Atlantic Ocean.

Conythorichthys cristi-galli. Ev. Kendall
Key West

Doubtfully American
Called Sygnathus hecketi Kaup.

Hannoeanfes nanus
Roeu, autos,
Dus. Mus. 1911.

Family CIV. HIPPOCAMPIDÆ. The Sea-Horses.

Genus 350. HIPPOCAMPUS Rafinesque.

Hippocampus Rafinesque, Indice d'Ittiologia Siciliana, 37, 1810 (*hippocampus*).

1164. Hippocampus ingens Girard. *Caballito del Mar.*

Pacific Coast from San Diego to Mazatlan.

Hippocampus ingens Girard, Pac. R. R. Surv., Fishes, 342, 1858, San Diego, Cal.

1165. Hippocampus hudsonius DeKay. *Common American Sea-horse.*

West Coast of northern Mexico, Mazatlan to San Diego, California.

Atlantic Coast of United States, from Cape Cod southward to Charleston.

Hippocampus hudsonius DeKay, N. Y. Fauna: Fishes, 322, pl. 53, fig. 171, 1842, New York.

1166. Hippocampus punctulatus Guichenot. *Caballito del Mar; Sea-horse.*

Tropical parts of the Atlantic; common in the West Indies, Brazil, and western Africa; Gulf Stream; Beaufort, North Carolina.

Hippocampus punctulatus Guichenot, in Sagra, Cuba, Poiss., 174, pl. 5, fig. 2, 1850, Cuba.

1167. Hippocampus stylifer Jordan & Gilbert.

Coasts of Florida; "Snapper Banks" off Pensacola and Tampa; Gulf Stream.

Hippocampus stylifer Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 265, "Snapper Banks," Gulf of Mexico.

1168. Hippocampus zosteræ Jordan & Gilbert.

Pensacola Bay, Florida.

Hippocampus zosteræ Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 265, Grand Lagoon, Pensacola, Florida.

Order BB. ACANTHOPTERI. The Spiny-rayed Fishes.

Suborder SALMOPERCÆ. The Trout Perches.

Family CV. PERCOPSIDÆ. The Sand-Rollers.

Genus 351. PERCOPSIS Agassiz.

Percopsis Agassiz, Lake Superior, 284, 1850 (*guttatus*).

omiscomaycus Walbaum!

1169. Percopsis guttatus Agassiz. *Sand-Roller; Trout Perch.*

Lake Champlain and Delaware River to Ohio River, Kansas, and northward; Great Lakes; Hudson Bay; Red River of the North; Saskatchewan River.

Percopsis guttatus Agassiz, Lake Superior, 286, 1850, Lake Superior.

Genus 352. COLUMBIA Eigenmann & Eigenmann.

Columbia Eigenmann & Eigenmann, Science, October 21, 1892, 233 (*transmontana*).

1170. Columbia transmontana Eigenmann & Eigenmann.

Columbia River basin; Umatilla and Wallula rivers.

Columbia transmontana Eigenmann & Eigenmann, Science, 1892, 233, mouth of Umatilla River, Oregon.

Suborder XENARCHI.

Family CVI. APHREDODERIDÆ. The Pirate Perches.

Genus 353. APHREDODERUS LeSueur. *Pirate Perches.*

Aphredoderus LeSueur, in Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 445, 1833 (*gibbosus* = *sayanus*).

1171. Aphredoderus sayanus (Gilliams). *Pirate Perch.*

From New York in coastwise streams to Texas; also in the Mississippi Basin north to Michigan.

Scolopsis sayanus Gilliams, Jour. Ac. Nat. Sci. Phila., IV, 1824, 81, near Philadelphia.

Suborder PERCESOCES.

Family CVII. ATHERINIDÆ. *The Silversides.*

Genus 354. ATHERINA (Artedi) Linnæus.

Atherina Artedi, in Linnæus, Syst. Nat., ed. x, 315, 1758 (*hepsetus*).

1172. Atherina stipes Müller & Troschel.

Barbados.

Atherina stipes Müller & Troschel, in Schomburgk, Hist. Barbados, 671, 1848, Barbados.

1173. Atherina laticeps Poey. *Cabezote; Bristle Herring.*

Caribbean Sea, north to western Florida; Key West, Havana, Jamaica, and Cozumel.

Atherina laticeps Poey, Memorias, II, 265, 1861, Havana.

1174. Atherina aræa Jordan & Gilbert.

Gulf of Mexico, at Key West and Cozumel.

Atherina aræa Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 27, Key West, Florida.

1175. Atherina harringtonensis Goode.

Bermudas.

Atherina harringtonensis Goode, Am. Jour. Sci. and Arts, 3d series, XIV, No. 82, 1877, 297, Bermuda Islands.

1176. Atherina carolina Cuvier & Valenciennes.

South Carolina.

Atherina carolina Cuvier & Valenciennes, Nat. Hist. Poiss., x, 445, 1835, South Carolina.

1177. Atherina microps Poey.

Havana.

Atherina microps Poey, Memorias, II, 266, 1861, Havana, Cuba.

Genus 355. CHIROSTOMA Swainson.

Chirostoma Swainson, Class. Fishes, etc., 243, 1839 (*humboldtianum*).

1178. Chirostoma estor Jordan. *Pescado Blanco de Chapala.*

Lake Chapala, Guanajuato.

Chirostoma estor Jordan, Proc. U. S. Nat. Mus. 1879, 298, Lake Chapala, Mexico.

1179. Chirostoma humboldtianum (Cuvier & Valenciennes).

Lake near the City of Mexico.

Atherina humboldtiana Cuvier & Valenciennes, Hist. Nat. Poiss., x, 479, 1835, lake at City of Mexico.

1180. Chirostoma grandocule (Steindachner). *Guerepo.*

Lake Pátzcuaro, Mexico.

Atherinichthys grandoculis Steindachner, Anzeiger der kais. Akad. d. Wissensch. Wien, 1894, 149, Lake Pátzcuaro, near the City of Mexico.

Genus 356. ESLOPSARUM Jordan & Evermann.

Eslopsarum, new genus (*jordani*).

1181. Eslopsarum jordani (Woolman).

City of Mexico; tributaries of Rio de Lerma, Mexico.

Chirostoma jordani Woolman, Bull. U. S. Fish. Com. 1894, 62, pl. 2, canals in City of Mexico; Rio de Lerma at Salamanca, Mexico.

1182. Eslopsarum bartoni (Jordan & Evermann).

Tributary of the Rio Lerma, near Guanajuato, Mexico.

Chirostoma bartoni Jordan & Evermann, Fishes North and Middle America, 793, 1896, tributary of the Rio Lerma, near Guanajuato, Mexico.

Genus 357. KIRTLANDIA Jordan & Evermann.

Kirtlandia Jordan & Evermann, Fishes North and Middle America, 794, 1896 (*vagrans*).

1183. Kirtlandia vagrans (Goode & Bean).

Coast of Gulf of Mexico, Florida to Texas.

Chirostoma vagrans Goode & Bean, Proc. U. S. Nat. Mus. 1879, 148, Pensacola, Florida.

1184. Kirtlandia martinica (Cuvier & Valenciennes).

Martinique.

Atherina martinica Cuvier & Valenciennes, Hist. Nat. Poiss., x, 459, 1835, Martinique.

1185. Kirtlandia laciniata (Swain). *Silver-fish.*

Lower Chesapeake to South Carolina.

Menidia vagrans laciniata Swain, in Jordan & Gilbert, Synopsis, 908, 1883, Beaufort, North Carolina.

Genus 358. MENIDIA Bonaparte.

Menidia Bonaparte, Fauna Italica, about 1836 (no type indicated, *menidia* doubtless intended).

1186. Menidia peninsulæ (Goode & Bean).

Florida and Gulf Coast.

Chirostoma peninsulæ Goode & Bean, Proc. U. S. Nat. Mus. 1879, 148, Pensacola and Lake Monroe, Florida.

1187. Menidia gracilis (Günther).

Atlantic Coast, from Massachusetts to Albemarle Sound.

Atherinichthys gracilis Günther, Cat., III, 405, 1861, no locality.

1187a. Menidia gracilis beryllina (Cope).

Potomac River, in fresh water.

Chirostoma beryllinum Cope, Trans. Am. Philos. Soc. 1866, 403, Potomac River near Washington.

1188. Menidia audens Hay. = m. gracilis fide Nichols.

Mississippi River, in Mississippi and Tennessee.

Menidia audens Hay, Bull. U. S. Fish Com. 1882, 64, Memphis, Tenn., and Vicksburg, Miss.

1189. Menidia gilberti Jordan & Bollman.

Panama.

Menidia gilberti Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 155, Panama.

1190. Menidia sardina (Jenkins & Evermann). *Pez del Rey.*

Gulf of California.

Atherina sardina Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 137, Guaymas, Sonora.

1191. Menidia notata (Mitchill). *Silverside.*

Atlantic Coast of United States, south to North Carolina.

Atherina notata Mitchill, Trans. Lit. and Phil. Soc. N. Y. 1815, 446, New York.

1192. Menidia menidia (Linnæus).

Atlantic Coast, Cape Hatteras to Florida.

Atherina menidia Linnæus, Syst. Nat., ed. XII, 519, 1766, Charleston, S. C.

1193. Menidia clara Evermann & Jenkins.

Gulf of California.

Menidia clara Evermann & Jenkins, Proc. U. S. Nat. Mus. 1891, 136, Guaymas, Sonora.

Genus 359. LEURESTHES Jordan & Gilbert.

Leuresthes Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 29 (*tenuis*).

1194. Leuresthes crameri Jordan & Evermann.

Ballenas Bay, Lower California.

Leuresthes crameri Jordan & Evermann, Fishes North and Middle America, 802, 1896, Ballenas Bay, Lower California.

1195. Leuresthes tenuis (Ayres).

Coast of California, from San Francisco to San Diego.

Atherinopsis tenuis Ayres, Proc. Cal. Ac. Sci. 1860, 76, San Francisco.

Genus 360. EURYSTOLE Jordan & Evermann.

Eurystole Jordan & Evermann, Fishes North and Middle America, 802, 1896 (*eriarcha*).

1196. Eurystole eriarcha (Jordan & Gilbert).

West coast of Mexico; Mazatlan.

Atherinella eriarcha Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 348, Mazatlan, Mexico.

Genus 361. THYRINA Jordan & Culver.

Thyrina Jordan & Culver, in Jordan, Fishes Sinaloa, 419, 1895 (*evermanni*).

1197. Thyrina evermanni Jordan & Culver.

West coast of Mexico; Mazatlan.

Thyrina evermanni Jordan & Culver, in Jordan, Fishes Sinaloa, 419, 1895, Mazatlan, Mexico.

1198. Thyrina crystallina Jordan & Culver.

Rio Presidio, near Mazatlan, Sinaloa.

Thyrina crystallina Jordan & Culver, in Jordan, Fishes Sinaloa, 420, 1895, Rio Presidio, below Presidio, Sinaloa.

1199. Thyrina guatemalensis (Günther).

Lakes of Guatemala.

Atherinichthys guatemalensis Günther, Proc. Zool. Soc. Lond. 1864, 151, lakes of Huamuchal, Guatemala.

1200. Thyrina pachylepis (Günther).

Panama.

Atherinichthys pachylepis Günther, Proc. Zool. Soc. Lond. 1864, 25, Panama.

Genus 362. ATHERINELLA Steindachner.

Atherinella Steindachner, Ichth. Beitr., II, 35, 1875 (*panamensis*).

1201. Atherinella panamensis Steindachner.

Panama.

Atherinella panamensis Steindachner, Ichth. Beitr., II, 35, 1875, Panama.

Genus 363. LABIDESTHES Cope.

Labidesthes Cope, Proc. Amer. Phil. Soc. Phila. 1870, 455 (*sicculum*).

1202. Labidesthes sicculus (Cope). *Brook Silverside; Skipjack.*

Lake Ontario and southern Michigan to Iowa, Florida, and Texas.

Chirostoma sicculum Cope, Proc. Ac. Nat. Sci. Phila. 1865, 81, Grosse Isle, Detroit River, Michigan.

Genus 364. ATHERINOPSIS Girard. *Pescado del Rey.*

Atherinopsis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 134 (*californiensis*).

1203. Atherinopsis californiensis Girard. *California Smelt; Pescado del Rey; Peixe Rey; Pesce-Rey.*

Coast of California, from Cape Mendocino to San Diego.

Atherinopsis californiensis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 134, San Francisco, Cal.

Genus 365. ATHERINOPS Steindachner. *Pescadillos del Rey.*
Atherinops Steindachner, Ichth. Beitr., III, 61, 1875 (*affinis*).

1204. Atherinops insularum (Gilbert).
San Clemente and San Nicolas islands of the Santa Barbara group; Guadalupe Island.
Atherina insularum Gilbert, Proc. U. S. Nat. Mus. 1891, 549, San Clemente, San Nicolas, and Guadalupe islands.

1205. Atherinops affinis (Ayres). *Little "Smelt"; Pescadillo del Rey.*
Coast of California.
Atherinopsis affinis Ayres, Proc. Cal. Ac. Sci. 1860, 73, San Francisco.

1206. Atherinops regis Jenkins & Evermann. *Pez del Rey.*
Gulf of California.
Atherinops regis Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 138, Bay of Guaymas, Sonora.

Family CVIII. MUGILIDÆ. The Mullets.

Genus 366. MUGIL (Artedi) Linnæus. *Mullets.*
Mugil Artedi, in Linnæus, Syst. Nat., ed. x, 316, 1758 (*cephalus*).

1207. Mugil brasiliensis Agassiz. *Lisa; Lebrancho; Queriman.*
Cuba to Patagonia; West Indies; Brazil; Havana.
Mugil brasiliensis Agassiz, Spix, Pisc. Brasil., 234, pl. 72, 1829, Atlantic Ocean, off Brazil.

1208. Mugil cephalus Linnæus. *Common Mullet; Striped Mullet; Céfalo; Macho; Machuto; Liza Cabezuda.*
Coasts of southern Europe and northern Africa; Atlantic Coast of America, from Cape Cod to Brazil; Pacific Coast, from Monterey to Chile.
Mugil cephalus Linnæus, Syst. Nat., ed. x, 316, 1758, Europe; based on Artedi.

1209. Mugil incilis Hancock. *Trench Mullet.*
Waters of Central America; Rio Chagres to Pará and Bahia.
Mugil incilis Hancock, Quart. Jour. Sci. 1830, 127, Guiana.

1210. Mugil thoburni Jordan & Starks.
Pacific Coast of Tropical America, from Guatemala to Galapagos.
Mugil thoburni Jordan & Starks, in Jordan & Evermann, Fishes North and Middle America, 812, 1896, Galapagos.

1211. Mugil curema Cuvier & Valenciennes. *White Mullet; Blueback Mullet; Liza; Liza Blanca; Red-and-black-eyed Mullet.*
Both coasts of America; Cape Cod to Brazil; Magdalena Bay to Chile.
Mugil curema Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 87, 1836, Brazil; Martinique; Cuba.

1212. Mugil hospes Jordan & Culver. *Lizita.*
West coast of Mexico.
Mugil hospes Jordan & Culver, in Jordan, Fishes Sinaloa, 422, pl. 31, 1895, Mazatlan, Mexico.

1213. Mugil gaimardianus Desmarest. *Red-eye Mullet; Liza Ojo de Perdriz.*
Florida Keys to Cuba; Key West.
Mugil gaimardianus Desmarest, Dict. Class., pl. 109, 1831, Cuba.

1214 Mugil setosus Gilbert.
Clarion Island of the Revillagigedo group.
Mugil setosus Gilbert, Proc. U. S. Nat. Mus. 1891, 549, Clarion Island.

1215. Mugil trichodon Poey. *Fan-tail Mullet.*
Florida Keys to Brazil; Key West.
Mugil trichodon Poey, Ann. Lyc. Nat. Hist. N. Y., XI, 1875, 66, pl. 8, figs. 4–8, Cuba.

Genus 367. CHÆNOMUGIL Gill.

Chænomugil Gill, Proc. Ac. Nat. Sci. Phila. 1863, 169 (*proboscideus*).

1216. Chænomugil proboscideus (Günther).

Pacific Coast of Tropical America; Mazatlan; Cordova; Panama.
Mugil proboscideus Günther, Cat., III, 459, 1861, island of Cordova (Cardea), west coast of Central America.

Genus 368. QUERIMANA Jordan & Gilbert.

Querimana Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 568 (*harengus*).

1217. Querimana harengus (Günther). *El Verde.*

Pacific Coast of tropical America, from Mazatlan to Peru.
Myxus harengus Günther, Cat., III, 467, 1861, Pacific Coast of Central America.

1218. Querimana gyrans Jordan & Gilbert. *Whirligig Mullet.*

South Atlantic Coast of North America, Woods Hole to Key West, and both coasts of Florida.
Querimana gyrans Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 26, Key West.

Genus 369. AGONOSTOMUS Bennett.

Agonostomus Bennett, Proc. Com. Zool. Soc. 1830, 166 (*telfairii*).

Subgenus DAJAUS Cuvier & Valenciennes.

Dajaus Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 164, 1836 (*monticola*)

1219. Agonostomus percoides Günther.

San Domingo.
Agonostoma percoides Günther, Cat., III, 464, 1861, San Domingo.

1220. Agonostomus monticola (Bancroft).

West Indies; eastern Mexico; Vera Cruz.
Mugil monticola Bancroft, in Griffith's edition of Cuvier's Animal Kingdom, Fishes, 367, pl. 36, 1836, Jamaica.

1221. Agonostomus nasutus Günther. *Trucha.*

Rivers of Central America, and north to Lower California.
Agonostoma nasutum Günther, Cat., III, 463, 1861, Rio Geronimo.

1222. Agonostomus microps Günther.

West Indies and Central America.
Agonostoma microps Günther, Cat., III, 462, 1861, probably West Indies.

Genus 370. JOTURUS Poey.

Joturus Poey, Memorias, II, 263, 1861 (*pichardi*).

1223. Joturus pichardi Poey. *Joturo; Bobo.*

Panama; Costa Rica; Cuba; Vera Cruz; Rio Almendares, near Havana.
Joturus pichardi Poey, Memorias, II, 263, 1861, cascades throughout Cuba.

Family CIX. SPHYRÆNIDÆ. The Barracudas.

Genus 371. SPHYRÆNA (Artedi) Bloch & Schneider.

Sphyræna Artedi, in Bloch & Schneider, Syst. Ichth., 109, 1801 (*sphyræna*).

1224. Sphyræna barracuda (Walbaum). *Great Barracuda; Picuda; Becuna; Short Barracuda.*

West Indies and Brazil, north to Pensacola, Charleston, and the Bermudas.
Esox barracuda Walbaum, Artedi Piscium, III, 94, 1792; after Catesby.

1225. Sphyræna ensis Jordan & Gilbert. *Picuda.*

Gulf of California to Panama.
Sphyræna ensis Jordan & Gilbert, Bull. U. S. Fish

—Alan.

1226. Sphyræna guaguanche Cuvier & Valenciennes. *Guaguanche; Guaguanche Pelon; Long Barracuda.*

West Indies north to Pensacola; Gulf Stream to Woods Hole.

Sphyræna guachancho Cuvier & Valenciennes, Hist. Nat. Poiss., III, 342, 1829 (*lapsus* for *guaguanche*), Havana.

1227. Sphyræna picudilla Poey. *Picudilla.*

West Indies on the coasts of Cuba; Bahia.

Sphyræna picudilla Poey, Memorias, II, 162, 1860, Havana.

1228. Sphyræna borealis DeKay. *Northern Barracuda.*

Atlantic Coast of the United States, from Cape Cod to North Carolina.

Sphyræna borealis DeKay, N. Y. Fauna: Fishes, 37, pl. 60, fig. 196, 1842, New York.

1229. Sphyræna argentea Girard. *California Barracuda; Barracouta.*

Pacific Coast, from San Francisco southward to Cape San Lucas.

Sphyræna argentea Girard, Proc. Ac. Nat. Sci. Phila 1854. 144, San Diego, Cal.

1230. Sphyræna sphyræna (Linnæus) *European Barracuda; Spet; Sennet.*

Coasts of southern Europe and neighboring islands, west to the Bermudas.

Esox sphyræna Linnæus, Syst. Nat., ed. x, 313, 1758, Mediterranean Sea.

Suborder RHEGNOPTERI.

Family CX. POLYNEMIDÆ. The Threadfins.

Genus 372. POLYNEMUS (Gronow) Linnæus. Pentanemus.

Polynemus (Gronow) Linnæus, Syst. Nat., ed. x, 317, 1758 (in part; *quinquarius; virginicus; paradiseus*).

1231. Polynemus quinquarius Linnæus.

Atlantic Ocean, West Indies to coast of Africa.

Polynemus quinquarius Linnæus, Syst. Nat., ed. x, 317, 1758, America; after Gronow.

Genus 373. POLYDACTYLUS Lacépède. *Barbudes.* TRICHIDION Klein Polynemus.

Polydactylus Lacépède, Hist. Nat. Poiss., v, 419, 1802 (*plumieri* = *virginicus*).

1232. Polydactylus approximans (Lay & Bennett). *Raton.*

Pacific Coast of tropical America, from Guaymas to Panama.

Polynemus approximans Lay & Bennett, Beechey's Voyage, Zool., Fish., 57, 1839, Mazatlan.

1233. Polydactylus virginicus (Linnæus). *"Catfish."*

West Indies, north to the Florida Keys.

Polynemus virginicus Linnæus, Syst. Nat., ed. x, 317, 1758, America.

1234. Polydactylus octonemus (Girard). Octonemus

New York to the Rio Grande.

Polynemus octonemus Girard, Proc. Ac. Nat. Sci. Phila 1859, 167, Brazos Santiago; Galveston.

1235. Polydactylus opercularis (Gill).

Pacific Coast of tropical America, from Cape San Lucas to Panama.

Trichidion opercularis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 149, Cape San Lucas.

Group AMMODYTOIDEI.

Family CXI. AMMODYTIDÆ. The Sand Lances.

Genus 374. AMMODYTES Artedi. Lonnæus. *Sand Lances.*

Ammodytes Artedi, in Linnæus, Syst. Nat., ed. x, 257, 1758. *tobianus*

1236. Ammodytes dubius Reinhardt.

Greenland to Cape Cod.

Ammodytes dubius Reinhardt, Danske Vid. Selsk. Skrifter, (Copenhagen) 1837, 1838. Greenland.

1237. Ammodytes alascanus Cope.

North Pacific Coast of North America, Sitka to Aleutian Islands.
Ammodytes alascanus Cope, Proc. Am. Philos. Soc. 1873, 7, Sitka.

1238. Ammodytes americanus DeKay. *Sand Launce; Sand Eel; Lant.*

Newfoundland to Cape Hatteras.
Ammodytes americanus DeKay, N. Y. Fauna: Fishes, 317, 1842, Stratford, Conn.

1239. Ammodytes personatus Girard. *Sand Launce.*

Alaska to Monterey, California.
Ammodytes personatus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 137, Cape Flattery, Washington.

Group BERYCOIDEI. The Berycoid Fishes.

Family CXII. BATHYCLUPEIDÆ.

Genus 375. BATHYCLUPEA Alcock.

Bathyclupea Alcock, Ann. and Mag. Nat. Hist., VIII, 1891, 130 (*hoskynii*).

1240. Bathyclupea argentea Goode & Bean.

Nevis Island, West Indies, in deep water.
Bathyclupea argentea Goode & Bean, Oceanic Ichthyology, 190, 1896, off Nevis Island, West Indies, at Blake Station 37, in 365 fathoms.

Family CXIII. STEPHANOBERYCIDÆ.

Genus 376. STEPHANOBERYX Gill.

Stephanoberyx Gill, Proc. U. S. Nat. Mus. 1883, 258 (*monæ*).

1241. Stephanoberyx monæ Gill.

Gulf Stream.
Stephanoberyx monæ Gill, Proc. U. S. Nat. Mus. 1883, 258, Gulf Stream, at Albatross Station 2077, in 1,255 fathoms.

1242. Stephanoberyx gillii Goode & Bean.

Gulf Stream.
Stephanoberyx gillii Goode & Bean, Oceanic Ichthyology, 187, fig. 206, 1896, Gulf Stream at Albatross Station 2099, in 2,949 fathoms.

Family CXIV. TRACHICHTHYIDÆ.

Genus 377. HOPLOSTETHUS Cuvier & Valenciennes.

Hoplostethus Cuv. & Val., Hist. Nat. Poiss., IV, 469, 1829 (*mediterraneus*).

1243. Hoplostethus mediterraneus Cuvier & Valenciennes.

Coasts of southern Europe; Gulf Stream.
Hoplostethus mediterraneus Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 469, 1829, Mediterranean Sea.

Family CXV. BERYCIDÆ. The Berycoids.

Genus 378. CAULOLEPIS Gill.

Caulolepis Gill, Forest and Stream, XXI, August 30, 1883, and in Proc. U. S. Nat. Mus., VI, 1884, 258 (*longidens*).

1244. Caulolepis longidens Gill.

Gulf Stream, in deep water.
Caulolepis longidens Gill, Proc. U. S. Nat. Mus. 1883, 258, Atlantic Ocean, latitude 39° 27′ N., longitude 69° 56′ 20″ W., in 1,346 fathoms.

Genus 379. ANOPLOGASTER Günther.

Anoplogaster Günther, Cat., I, 12, 1859 (*cornutus*).

1245. Anoplogaster cornutus (Cuvier & Valenciennes).

North Atlantic, in deep water.
Hoplostethus cornutus Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 270, 1833, from stomach of an albicore, taken at 31° N., 40° W.

Unalaska.

Bering Sea.

also Cortez Banks, off San Diego, Albatross.

Genus 380. POROMITRA Goode & Bean.

Poromitra Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 214, 1882 (*capito*).

1246. Poromitra capito Goode & Bean.

Gulf Stream, in latitude 34°.

Poromitra capito Goode & Bean, Bull. M. C. Z., x, No. 5, 215, 1882, Gulf Stream.

Genus 381. PLECTROMUS Gill.

Plectromus Gill, Proc. U. S. Nat. Mus. 1883, 257 (*suborbitalis*).

1247. Plectromus suborbitalis Gill.

Gulf Stream, in deep water.

Plectromus suborbitalis Gill, Proc. U. S. N. M., vi, 1883, 258, 38° 52′ N., 69° 24′ W., at Albatross Stations 2036, 2190, and 2535, in 1,149 to 1,800 fathoms.

1248. Plectromus lugubris (Gilbert).

Coast of California.

Melamphaës lugubris Gilbert, Proc. U. S. N. M. 1890 (1891), 59, coast of California, south of Point Conception, at Albatross Station 2923, in 822 fathoms.

1249. Plectromus beanii (Günther).

Gulf Stream.

Melamphaës beanii Günther, Deep Sea Fishes, Challenger, xxii, 29, 1887, Gulf Stream, in about latitude 40°.

1250. Plectromus crassiceps (Günther).

Mid-Atlantic; Pernambuco.

Scopelus crassiceps Günther, Ann. Mag. Nat. Hist., ii, 1878, 185, deep water in mid-Atlantic and off Pernambuco.

1251. Plectromus cristiceps (Gilbert).

Coast of Washington and Oregon.

Melamphaës cristiceps Gilbert, Proc. U. S. Nat. Mus. 1890 (1891), 60, coast of Oregon and Washington at Albatross Station 3075, in 859 fathoms.

Genus 382. BERYX Cuvier.

Beryx Cuvier, Règne Animal, ed. 2, ii, 151, 1829 (*decadactylus*).

1252. Beryx decadactylus Cuvier & Valenciennes. *Alfonsin a Casta Larga.*

Portugal, Madeira, Japan, and Cuba.

Beryx decadactylus Cuvier & Valenciennes, Hist. Nat. Poiss., iii, 222, 1829, Madeira or Portugal.

1253. Beryx splendens Lowe. *Alfonsin a Casta Cumprida.*

Madeira, Japan, and Gulf Stream at 35° 49′ 30″ N., 74° 34′ 45″ W., in 424 fathoms.

Beryx splendens Lowe, Proc. Zool. Soc. Lond. 1833, 142, Madeira.

Family CXVI. HOLOCENTRIDÆ. The Squirrel-Fishes.

Genus 383. MYRIPRISTIS Cuvier.

Myripristis Cuvier, Règne Animal, ed. 2, ii, 150, 1829 (*jacobus*).

Subgenus OSTICHTHYS Langsdorf.

Ostichthys Langsdorf, in Cuvier & Valenciennes, Hist. Nat. Poiss., iii, 174, 1829, name only, passing reference.

1254. Myripristis trachypoma Günther.

West Indies, Cuba.

Myripristis trachypoma Günther, Cat., i, 25, 1859, Cuba.

Subgenus MYRIPRISTIS Cuvier.

1255. Myripristis jacobus Cuvier & Valenciennes. *Frère Jacques: Candil.*

West Indies to Brazil.

Myripristis jacobus Cuvier & Valenciennes, Hist. Nat. Poiss., iii, 162, 1829, Martinique.

1256. Myripristis occidentalis Gill.

West coast of America, from Cape San Lucas to Panama.

Myriopristis occidentalis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 87, Cape San Lucas.

1257. Myripristis pœcilopus (Gill).

West coast of America, from Cape San Lucas to Panama.

Rhamphoberyx pœcilopus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 87, Cape San Lucas.

Genus 384. HOLOCENTRUS Gronow. *Squirrel-fishes.*

Holocentrus Gronow, Zoophyl., 65, 1763 (*rostratus*).

1258. Holocentrus ascensionis (Osbeck). *Matejuelo; Squirrel-fish; Welshmas; Soldado.*

Florida to St. Helena; Cuba.

Perca ascensionis Osbeck, Iter Chin., 388, 1771, Ascension Island.

1258a. Holocentrus ascensionis rufus (Walbaum).

Bahia; Cuba.

Perca rufa Walbaum, Artedi Pisc., 351, 1792, Bahamas; after *perca marina rubra* of Catesby.

1259. Holocentrus siccifer Cope.

Bahamas.

Holocentrum siccifer Cope, Trans. Amer. Philos. Soc., xxx, 1866, 465, New Providence, Bahamas.

1260. Holocentrus suborbitalis Gill. *Mojarra Cardinal.*

Mazatlan to Panama.

Holocentrum suborbitale Gill, Proc. Ac. Nat. Sci. Phila. 1863, 86, Cape San Lucas.

1261. Holocentrus coruscus Poey.

West Indies; Cuba and the Bahamas.

Holocentrum coruscum Poey, Memorias, ii, 158, 1860, Cuba.

1262. Holocentrus brachypterus Poey.

Cuba.

Holocentrus brachypterus Poey, Repertorio, 184, 1866, Cuba.

1263. Holocentrus marianus Cuvier & Valenciennes. *Marian.*

West Indies: Cuba, Jamaica, and Martinique.

Holoncentrum marianum Cuvier & Valenciennes, Hist. Nat. Poiss., iii, 219, 1829, Martinique.

1264. Holocentrus vexillarius Poey.

Cuba.

Holocentrum vexillarium Poey, Memorias, ii, 158, 1860, Cuba.

1265. Holocentrus osculus Poey.

Cuba.

Holocentrum osculum Poey, Memorias, ii, 156, 1860, Cuba.

1266. Holocentrus sancti-pauli Günther.

St. Paul Rocks, mid-Atlantic.

Holocentrum sancti-pauli Günther, Shore Fishes, 4, 1880, St. Paul Rocks.

Genus 385. PLECTRYPOPS Gill.

Plectrypops Gill, Proc. Ac. Nat. Sci. Phila. 1862, 237 (*retrospinis*).

1267. Plectrypops retrospinis (Guichenot).

Cuba.

Holocentrum retrospinis Guichenot, in Ramon de la Sagra, Hist. Cuba, 35, pl. 1, fig. 3, 1850, Cuba.

Myrsinoides

— Gilbert
Panama.

H. aiecifer + H. puncticulatus Barbour
same as corusceus fide Rosen
Lund Mus. 1911.

new genus?

Family CXVII. POLYMIXIIDÆ. The Barbudos.

Genus 386. POLYMIXIA Lowe.
Polymixia Lowe, Trans. Cambr. Phil. Soc. 1838, 198 (*nobilis*).

1268. Polymixia lowei Günther.
Caribbean Sea; Cuba.
Polymixia lowei Günther, Cat., I, 17, 1859, Caribbean Sea.

Family CXVIII. MULLIDÆ. The Surmullets.

Genus 387. MULLUS Linnæus. *Surmullets.*
Mullus Linnæus, Syst. Nat., ed. x, 299, 1758 (*barbatus*).

1269. Mullus auratus Jordan & Gilbert.
Eastern coast of North America, Cape Cod to Pensacola.
Mullus barbatus auratus Jordan & Gilbert, Proc. J. S. Nat. Mus. 1882, 280, Pensacola, Florida.

Genus 388. MULLOIDES Bleeker.
Mulloides Bleeker, Ceram., II, 697, 1865 (*flavolineatus*).

1270. Mulloides rathbuni (Evermann & Jenkins).
Gulf of California.
Upeneus rathbuni Evermann & Jenkins, Proc. U. S. Nat. Mus. 1891, 158, pl. 2, fig. 4, Bay of Guaymas, Sonora.

Genus 389. UPENEUS Cuvier. *Goatfishes.*
Upeneus Cuvier, Règne Animal, ed. 2, vol. 2, 157, 1829 (*vittatus; russellii; bifasciatus; trifasciatus;* restricted by Bleeker to *bifasciatus*).

1271. Upeneus maculatus (Bloch). *Red Goatfish; Salmonete.*
West Indies and Brazil, Key West to Rio Janeiro.
Mullus maculatus Bloch, Ichthyologia, 348, 1793, Brazil.

1272. Upeneus dentatus Gill.
Pacific Coast of Mexico, Cape San Lucas, La Paz, and the Tres Marias Islands.
Upeneus dentatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 256, Cape San Lucas.

1273. Upeneus parvus Poey.
Cuba.
Upeneus parvus Poey, Memorias, I, 226, 1851, Cuba.

1274. Upeneus martinicus Cuvier & Valenciennes. *Yellow Goatfish; Salmonete Amarilla; King Mullet.*
West Indies, north to Key West.
Upeneus martinicus Cuvier & Valenciennes, Hist. Nat. Poiss., III, 483, 1829, Martinique.

1275. Upeneus xanthogrammus Gilbert.
La Paz, Lower California.
Upeneus xanthogrammus Gilbert, Proc. U. S. Nat. Mus. 1891, 553, La Paz, Lower California.

1276. Upeneus grandisquamis Gill. *Chiro.*
Pacific Coast of Mexico and Central America, Guaymas to Panama.
Upeneus grandisquamis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 168, west coast of Central America.

Group SCOMBROIDEI. The Mackerel-like Fishes.

Family CXIX. SCOMBRIDÆ. The Mackerels.

Genus 390. SCOMBER (Artedi) Linnæus.

Scomber Artedi, in Linnæus, Syst. Nat., ed. x, 297, 1758 (*scombrus*).

Subgenus SCOMBER (Artedi) Linnæus.

1277. Scomber scombrus Linnæus. *Common Mackerel.*

North Atlantic; Norway and Labrador; south to Spain and Cape Hatteras.
Scomber scombrus Linnæus, Syst. Nat., ed. x, 297, 1758, Atlantic.

Subgenus PNEUMATOPHORUS Jordan & Gilbert.

Pneumatophorus Jordan & Gilbert. Proc. U.S. N. M. 1882, 593 (*pneumatophorus*).

1278. Scomber colias Gmelin. *Chub Mackerel; Tinker Mackerel; Easter Mackerel; Thimble-eyed Mackerel; "Spanish Mackerel" of England.*

Atlantic and Pacific, north to England, Maine, and San Francisco; Mediterranean and southern California.
Scomber colias Gmelin, Syst. Nat., ed. XIII, 1329, 1788, Sardinia.

Genus 391. AUXIS Cuvier. *Frigate Mackerels.*

Auxis Cuvier, Règne Animal, ed. II, vol. 2, 119, 1829 (*rochei*).

1279. Auxis thazard (Lacépède). *Frigate Mackerel.*

All warm seas, occasionally northward to Cape Cod.
Scomber thazard Lacépède, Hist. Nat. Poiss., III, 9, 1802, 6° and 7° S. lat., coast of New Guinea.

Genus 392. GYMNOSARDA Gill. *Little Tunnies.* Pelamys Klein

Gymnosarda Gill, Proc. Ac. Nat. Sci. Phila. 1862, 125 (*unicolor*).

1280. Gymnosarda pelamis (Linnæus). *Oceanic Bonito.* = Katsuwonus

Warm seas; north to Cape Cod and Bermudas on the Atlantic Coast.
Scomber pelamis Linnæus, Syst. Nat., ed. x, 297, 1758, "in Pelago inter Tropicos."

1281. Gymnosarda alleterata (Rafinesque). *Little Tunny; Bonito.*

Warm seas; Cape Cod; West Indies; Mediterranean.
Scomber alletteratus Rafinesque, Carat. Alcuni Gen., etc., 46, 1810, Palermo.

Genus 393. THUNNUS South. *Great Tunnies.*

Thunnus South, Encyclop. Metropol., v, 620, 1845 (*thynnus*).

1282. Thunnus thynnus (Linnæus). *Tunny; Horse-mackerel; Great Albacore; Tuna.*

Cape Cod and off all coasts; north to England, Newfoundland, San Francisco, and Japan.
Scomber thynnus Linnæus, Syst. Nat., ed. x, 297, 1758, Europe.

Genus 394. GERMO Jordan. *Albacores.*

Germo Jordan, Proc. Ac. Nat. Sci. Phila. 1888, 180 (*alalonga*).

1283. Germo alalunga (Gmelin). *Long-finned Albacore; Albecor; Alilonghi; Germon.*

Mediterranean; San Francisco; Santa Barbara Islands.
Scomber alalunga Gmelin, Syst. Nat., I, 1330, 1788, Sardinia.

Genus 395. SARDA Cuvier. *Bonitos.*

Sarda Cuvier, Règne Animal, ed. 2, II, 199, 1829 (*pelamys* = *sarda*).

1284. Sarda sarda (Bloch). *Bonito.*

Atlantic Ocean, on both coasts, north to Cape Cod.
Scomber sarda Bloch, Ichthyologia, x, 35, pl. 334, 1793, Europe.

1285. Sarda chilensis (Cuvier & Valenciennes). *California Bonito; Skipjack.*

San Francisco to Patagonia and Japan.
Pelamys chilensis Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 163, 1831, Valparaiso.

japonicus. diego: cotias.

Euthynnus

? Sarda lineolata.

Genus 396. SCOMBEROMORUS Lacépède.

Scomberomorus Lacépède, Hist. Nat. Poiss., III, 292, 1802 (*plumierii*).

1286. Scomberomorus concolor (Lockington). *Monterey Spanish Mackerel.*

Monterey Bay, California; Santa Cruz.

Chriomitra concolor Lockington, Proc. Ac. Nat. Sci. Phila. 1879, 133, Monterey, California.

1287. Scomberomorus maculatus (Mitchill). *Spanish Mackerel.*

East coast of America from Cape Ann to Brazil; common in Gulf of Mexico, but rare or unknown about Cuba.

Scomber maculatus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 426, New York.

1288. Scomberomorus sierra Jordan & Starks. *Sierra.*

Pacific Coast of Tropical America.

Scomberomorus sierra Jordan & Starks, in Jordan, Fishes Sinaloa, 428, 1895, Mazatlan, Mexico.

1289. Scomberomorus regalis (Bloch). *Sierra; Pintado.*

Cape Cod to Brazil; Cuba.

Scomber regalis Bloch, Ichthyol., pl. 333, 1795, Martinique; after a drawing by Plumier.

Sierra

1290. Scomberomorus cavalla (Cuvier). *Sierra; Kingfish; Cavalla; Cero.*

Tropical Atlantic; Florida Keys and Charleston; Cape Cod; Africa; Brazil.

Cybium caralla Cuvier, Règne Animal, ed. 2, II, 200, 1829; after *Guarapucu* of Marcgrave.

Genus 397. ACANTHOCYBIUM Gill. *Petos.*

Acanthocybium Gill, Proc. Ac. Nat. Sci. Phila. 1862, 125 (*sara* = *solandri*).

1291. Acanthocybium solandri (Cuvier & Valenciennes). *Peto; Wahoo; Guarapucu.*

petus Poey.

Tropical seas; Cuba; Key West.

Cybium solandri Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 192, 1831; after MS. of Solander, open sea; no locality.

Family CXX. GEMPYLIDÆ. The Escolars.

Genus 398. ESCOLAR Jordan & Evermann.

Escolar Jordan & Evermann, in Goode & Bean, Oceanic Ichthology, 519, 1896 (*violaceus*).

1292. Escolar violaceus (Bean).

Le Have Bank.

Thyrsitops violaceus Bean, Proc. U. S. Nat. Mus. 1887, 513, Le Have Bank.

Genus 399. RUVETTUS Cocco. *Escolars.*

Ruvettus Cocco, Giorn. Sci. Sicilia, XLII, 2, 1829 (*pretiosus*).

1293. Ruvettus pretiosus Cocco. *Escolar; Rovetto; Ruvetto; Chicola; Oilfish; Scourfish; Plain-tail.*

Mediterranean and westward in the Atlantic.

Ruvettus pretiosus Cocco, in Giornale di Scienz e per la Sicilia, XLII, 21, 1829, Messina.

Genus 400. EPINNULA Poey.

Epinnula Poey, Memorias, I, 369, 1854 (*magistralis*).

1294. Epinnula magistralis Poey. *Dómine.*

Havana.

Epinnula magistralis Poey, Memorias, I, 369, 1854, Havana.

Genus 401. NEALOTUS Johnson.

Nealotus Johnson, Proc. Zool. Soc. Lond. 1865, 434 (*tripes*).

1295. Nealotus tripes Johnson.

Madeira; between the Bahamas and Bermudas.

Nealotus tripes Johnson, Proc. Zool. Soc. Lond. 1865, 434, Madeira.

Genus 402. PROMETHICHTHYS Gill.

Promethichthys Gill, Mem. Nat. Ac. Sci., VI, 1893, 115 and 123 (*prometheus*).

1296. Promethichthys prometheus (Cuvier & Valenciennes). *Rabbit-fish; Corbo; Conejo; Bermuda Catfish.*

Tropical Atlantic; Cuba; Bermudas.

Gempylus prometheus Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 213, pl. 222, 1831, St. Helena.

1297. Promethichthys parvipinnis (Goode & Bean).

Western Atlantic.

Dicrotus parvipinnis Goode & Bean, Oceanic Ichthyology, 201, 1896, Gulf Stream at Albatross Stations 2537, 2542, and 2601, at about 40° N., 70° W.

Genus 403. GEMPYLUS Cuvier & Valenciennes. *Snake Mackerels.*

Gempylus Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 207, 1831 (*serpens*).

1298. Gempylus serpens Cuvier & Valenciennes.

Deep seas.

Gempylus serpens Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 207, 1831, Martinique.

Family CXXI. LEPIDOPIDÆ.

Genus 404. APHANOPUS Lowe.

Aphanopus Lowe, Proc. Zool. Soc. Lond. 1839, 79 (*carbo*).

1299. Aphanopus minor Collett.

East coast of Greenland.

Aphanopus minor Collett, Vidensk. Selsk. Forhandl. Christiania, No. 19, 3, 1886, east coast of Greenland, at 65° N., 31° W.

Genus 405. EVOXYMETOPON Poey. *Tirantes.*

Evoxymetopon Poey, in Gill, Proc. Ac. Nat. Sci. Phila. 1863, 228 (*tæniatus*).

1300. Evoxymetopon tæniatus Poey. *Tirante.*

Cuba.

Evoxymetopon tæniatus Poey, in Gill, Proc. Ac. Nat. Sci. Phila. 1863, 228, Cuba.

Genus 406. LEPIDOPUS Gouan. *Frost-fishes.*

Lepidopus Gouan, Hist. Nat. Poiss., 185, 1770 (*gouani*).

1301. Lepidopus caudatus (Euphrasen). *Frost-fish; Scabbard-fish.*

Atlantic; Norway to South Africa and New Zealand.

Trichiurus caudatus Euphrasen, Stockh. K. Vet. Ac. Nya Handl., 52, pl. 9, fig. 2, 1788, Mediterranean.

Genus 407. BENTHODESMUS Goode & Bean.

Benthodesmus Goode & Bean, Proc. U. S. Nat. Mus., IV, 1881, 380 (*elongatus*).

1302. Benthodesmus atlanticus Goode & Bean.

Western edge Grand Bank of Newfoundland, in 80 fathoms.

Benthodesmus atlanticus Goode & Bean, Oceanic Ichth., 205, 1896, Grand Bank.

Family CXXII. TRICHIURIDÆ. The Cutlas-Fishes.

Genus 408. TRICHIURUS Linnæus. *Hairtails.*

Trichiurus Linnæus, Syst. Nat., ed. x, 246, 1758 (*lepturus*).

1303. Trichiurus lepturus Linnæus. *Cutlas-fish; Scabbard-fish; Silver-fish; Sable; Sarola.*

Warm seas north to Virginia and Lower California; West Indies.

Trichiurus lepturus Linnæus, Syst. Nat., ed. x, 246, 1758, America; after *Lepturus* of Artedi.

Hempylus is prior to Lemnisoma
dec. Regan

Lepidopus xiantiri Goode & Bean
Cape San Lucas. and Calif

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Family CXXIII. ISTIOPHORIDÆ. The Sail-Fishes.

Genus 409. ISTIOPHORUS Lacépède. *Sail-fishes.*

Istiophorus Lacépède, Hist. Nat. Poiss., III, 374, 1802 (*gladifer*=*gladius*).

1304. Istiophorus nigricans (Lacépède). *Sail-fish; Spike-fish; Bookoo; Guebucu; Vollier; Aguja Voladora; Aguja Prieta.*

West Indies and warmer parts of the Atlantic, north to Key West and France; Florida Keys; Newport; south of Savannah.

Makaira nigricans Lacépède, Hist. Nat. Poiss., IV, 688, 1803, Rochelle; from a drawing by M. Traversay.

Genus 410. TETRAPTURUS Rafinesque. *Spear-fishes.*

Tetrapturus Rafinesque, Indice d'Ittiol. Sicil., 30, 1810 (*belone*).

1305. Tetrapturus ~~imperator (Bloch & Schn~~eider). *Bill-fish; Spear-fish; Aguja Blanca; Aguja de Paladar.*

West Indies; Cape Cod.

Xiphias imperator Bloch & Schneider, Syst. Ichth., 93, pl. XXI, 1801, Mediterranean; after Duhamel.

1306. Tetrapturus amplus Poey. *Aguja de Casta.*

West Indies.

Tetrapturus amplus Poey, Memorias, II, 243, 1861, Havana.

Family CXXIV. XIPHIIDÆ. The Sword-Fishes.

Genus 411. XIPHIAS Linnæus. *Sword-fishes.*

Xiphias Linnæus, Syst. Nat., ed. x, 248, 1758 (*gladius*).

1307. Xiphias gladius Linnæus. *Common Sword-fish; Espada; Espadon; Emperador.*

Atlantic Ocean on both coasts; Cuba to Cape Breton and Newfoundland Banks; Pacific at Santa Barbara Islands.

Xiphias gladius Linnæus, Syst. Nat., ed. x, 248, 1758, Europe.

Family CXXV. NEMATISTIIDÆ. The Papagallos.

Genus 412. NEMATISTIUS Gill.

Nematistius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 258 (*pectoralis*).

1308. Nematistius pectoralis Gill.

Gulf of California to Panama; Cape San Lucas; Guaymas; Pichelnogo, Mazatlan; Magdalena Bay; Panama.

Nematistius pectoralis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 259, Cape San Lucas.

Family CXXVI. CARANGIDÆ. The Pampanos.

Genus 413. OLIGOPLITES Gill.

Oligoplites Gill, Proc. Ac. Nat. Sci. Phila. 1863, 166 (*occidentalis*).

1309. Oligoplites saurus (Bloch & Schneider). *Leather-jacket; Leather-coat.*

Both coasts of America, and West Indies, north to New York and Lower California.

Scomber saurus Bloch & Schneider, Syst. Ichth., 32, 1801, Jamaica.

1310. Oligoplites saliens (Bloch). *Sauteur.*

West Indies.

Scomber saliens Bloch, Ichthyologia, pl. 335, 1793, Martinique; on a figure by Plumier.

1310a. Oligoplites ~~saliens~~ **palometa** (Cuvier & Valenciennes).

Lake Maracaibo, Venezuela.

Chorinemus palometa Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 392, 1831, *Lake Maracaibo*, Venezuela.

1311. Oligoplites altus (Günther).
Pacific Coast of tropical America; Panama.
Chorinemus altus Günther, Fishes Central Amer., 433, 1869, Panama.

1312. Oligoplites mundus Jordan & Starks.
West coast of Mexico; Mazatlan.
Oligoplites mundus Jordan & Starks, in Jordan, Proc. Cal. Ac. Sci. 1896. Mazatlan, Mexico.

Genus 414. NAUCRATES Rafinesque.
Naucrates Rafinesque, Caratteri di Alcuni Nuovi Generi, etc., 44, 1810 (*ductor*).

1313. Naucrates ductor (Linnæus). *Pilot-fish; Romero.*
Atlantic Coast, from Cape Cod to the West Indies.
Gasterosteus ductor Linnæus, Syst. Nat., ed. x, 295, 1758, "in pelago."

Genus 415. SERIOLA Cuvier.
Seriola Cuvier, Règne Animal, ed. 2, II, 205, 1829 (*dumerili*).

1314. Seriola dorsalis (Gill). *Yellow-tail.*
Pacific Coast, from Point Conception southward to Mazatlan; Santa Barbara Islands.
Halatractus dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 84, Cape San Lucas.

1315. Seriola zonata (Mitchill). *Shark Pilot; Rudder-fish.*
Atlantic Coast of the United States, from Cape Cod to Cape Hatteras.
Scomber zonatus Mitchill, Trans. Lit. Phil. Soc. N. Y. 1815, 427, New York Bay.

1315a. Seriola zonata carolinensis Holbrook.
Gulf of Mexico, and on Atlantic Coast north to Cape Hatteras.
Seriola carolinensis Holbrook, Ichthyol. S. C., 72, 1860, Charleston, S. C.

1316. Seriola lalandi Cuvier & Valenciennes. *Great Amber-fish; Amber Jack; Coronado.*
West Florida to Brazil; Key West.
Seriola lalandi Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 208, 1833, Brazil.

1317. Seriola dumerili (Risso). *Amber Jack; Coronado.*
Mediterranean to West Indies, north to Key West and Pensacola.
Caranx dumerili Risso, Ichthyol. Nice, 175, pl. 6, fig. 20, 1810, Nice.

Subgenus ZONICHTHYS Swainson.
Zonichthys Swainson, Nat. Hist. Class. Fishes, II, 1839 (*fasciatus*).

1318. Seriola mazatlana Steindachner.
West coast of Mexico, Mazatlan.
Seriola mazatlana Steindachner, Ichth. Beitr., V, 8, 1876, Mazatlan, Mexico.

1319. Seriola fasciata (Bloch). *Madregal.*
West Indies, north to Charleston, South Carolina.
Scomber fasciatus Bloch, Ichthyologia, pl. 341, 1793, no locality.

1320. Seriola rivoliana Cuvier & Valenciennes.
Mediterranean to Brazil, West Indies, and South Carolina; Florida coast.
Seriola rivoliana Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 207, 1833, the Greek Archipelago.

1321. Seriola falcata Cuvier & Valenciennes. *Madregal; "Rock Salmon."*
West Indies, north to Florida and Carolina.
Seriola falcata Cuv. & Val., Hist. Nat. Poiss., IX, 210, 1833, Gulf of Mexico.

Genus 416. ELAGATIS Bennett.
Elagatis Bennett, Narrative of a Whaling Voyage, II, 283, 1840 (*bipinnulata*).

1322. Elagatis bipinnulatus (Quoy & Gaimard). *Runner; Yellow-tail.*
Tropical seas; West Indies; Long Island.
Seriola bipinnulata Quoy & Gaimard, Voy. Uran., Zool., I, 363, pl. 61, fig. 3, 1824.

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Genus 417. DECAPTERUS Bleeker. *Mackerel Scads.*

Decapterus Bleeker, Natuurk. Tydschr., v, 1855, 417 (*kurra*).

1323. Decapterus punctatus (Agassiz). *Scad; Round Robin; Cigar-fish; Quia-quia.*

Cape Cod to Brazil, coasts of Florida and the West Indies.

Caranx punctatus Agassiz, Spix, Pisc. Bras., 108, pl. 56*a*, fig. 2, 1829, Brazil.

1324. Decapterus scombrinus (Valenciennes).

Galapagos Islands.

Caranx scombrinus Valenciennes, Voyage de la Vénus, 332, pl. 7, fig. 1, 1846, Galapagos Islands.

1325. Decapterus sanctæ-helenæ Cuvier & Valenciennes.

South America, both coasts; Cuba.

Decapterus sanctæ-helenæ Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 37, 1833, St. Helena.

1326. Decapterus hypodus Gill.

Cape San Lucas.

Decapterus hypodus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 261, Cape San Lucas.

1327. Decapterus macarellus (Cuvier & Valenciennes). *Mackerel Scad; Antonino.*

Warm parts of the Atlantic, northward to Cape Cod.

Caranx macarellus Cuv. & Val., Hist. Nat. Poiss., IX, 40, 1833, Martinique.

Genus 418. TRACHURUS Rafinesque. *Saurels.*

Trachurus Rafinesque, Indice d'Ittiologia Siciliana, 20, 1810 (*trachurus*).

1328. Trachurus picturatus (Bowdich). *Horse-mackerel; Xurel.*

Coast of California, from San Francisco southward to the Galapagos Islands and Chile; Mediterranean and New Zealand.

Seriola picturata Bowdich, Excursion to Madeira, 123, fig. 27, 1825, Madeira.

1329. Trachurus trachurus (Linnæus). *Gascon; Saurel.*

North Atlantic, chiefly on the coast of Europe, south to Spain and Naples; Newport, Rhode Island; Pensacola; ~~also on the west coast at Cape~~ San Lucas.

Scomber trachurus Linnæus, Syst. Nat., ed. x, 298, 1758, Mediterranean.

Genus 419. TRACHUROPS Gill.

Trachurops Gill, Proc. Ac. Nat. Sci. Phila. 1862, 431 (*crumenophthalmus*).

1330. Trachurops crumenophthalmus (Bloch). *Goggler; Big-eyed Scad; Goggle-eye Jack; Chicharro.*

Atlantic coast of the United States, Central America, South America, and Africa; West Indies; Cape San Lucas; Panama.

Scomber crumenophthalmus Bloch, Ichthyol., pl. 343, 1793, Acara in Guinea.

Genus 420. HEMICARANX Bleeker.

Hemicaranx Bleeker, Versl. Kon. Ak. Wet., XIV, 134, 1862 (*marginatus*).

1331. Hemicaranx amblyrhynchus (Cuvier & Valenciennes).

Cape Hatteras to Brazil; West Indies; Carolina and Florida.

Caranx amblyrhynchus Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 100, pl. 248, 1833, Brazil.

1332. Hemicaranx atrimanus (Jordan & Gilbert).

Pacific Coast of tropical America; Panama.

Caranx atrimanus Jordan & Gilbert, Bull. U. S. F. C., I, 1881, 308, Panama.

1333. Hemicaranx secundus (Poey). *Segundo; Volantin.*

Cuba.

Caranx secundus, Poey, Memorias, II, 223, 1860, Cuba.

1334. Hemicaranx furthii (Steindachner).

Panama.

Caranx fürthii Steindachner, Ichth. Beitr., IV, 12, 1875, Panama.

1335. Hemicaranx leucurus (Günther).
Pacific Coast of tropical America; Panama.
Caranops leucurus Günther, Proc. Zool. Soc. Lond. 1864, 24, Panama.

Genus 421. CARANX Lacépède.
Caranx Lacépède, Hist. Nat. Poiss., III, 72, 1802 (*trachurus, speciosus, carangus, ruber*, etc.).

Subgenus SELAR Bleeker.
Selar Bleeker, Verhandl. Batav. Genootsch., XIV, 1851 (*boops*).

1336. Caranx vinctus Jordan & Gilbert. *Cocinera.*
Pacific Coast of Mexico, Mazatlan to Punta Arenas; Gulf of California; Central America.
Caranx vinctus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 349, Mazatlan.

Subgenus CARANX Lacépède.

1337. Caranx ruber (Bloch). *Cibi; Carbonero; Green Jack.*
West Indies.
Scomber ruber Bloch, Ichthyologia, pl. 342, 1793, Ste. Croix.

1338. Caranx bartholomæi Cuvier & Valenciennes. *Yellow Jack; Cibi Amarillo.*
West Indies, northward to Florida and North Carolina; Cuba.
Caranx bartholomæi Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 100, 1833, St. Bartholomew.

Subgenus TRICROPTERUS Rafinesque.
Tricropterus Rafinesque, Caratteri Alcuni Nuovi Generi, 41, 1810 (*carangus = hippos*).

1339. Caranx hippos (Linnæus). *Crevallé; Toro; Horse-cavallé; Crevally Jack; Jiguagua.*
Warm seas generally, both coasts of tropical America, north to Cape Cod and Gulf of California; East Indies.
Scomber hippos Linnæus, Syst. Nat., ed. XII, 494, 1766, Charleston, S. C.

Subgenus PARATRACTUS Gill.
Paratractus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 432 (*pisquetus = crysos*).

1340. Caranx crysos (Mitchill). *Hard-tail; Runner; Jurel; Yellow Mackerel; Cojinera; Crevallé.*
Cape Cod to Brazil.
Scomber crysos Mitchill, Trans. Lit. Phil. Soc. N. Y. 1815, 424, New York.

1341. Caranx caballus (Günther). *Cocinero; Jurel; Cocinero Dorado.*
Pacific Coast of tropical America, San Diego to Panama.
Caranx caballus Günther, Fish. Centr. Amer., 431, 1869, Panama.

Subgenus CARANGICHTHYS Bleeker.
Carangichthys Bleeker, Bijdragen Ichthyol. Fauna Celebes, III, 760, about 1852 (*typus*).

1342. Caranx marginatus Gill.
Pacific Coast of Mexico; Mazatlan and Panama.
Caranx marginatus Gill, Proc. Ac. Nat. Sci. Phila. 1866, 166, Panama.

1343. Caranx latus Agassiz. *Jurel; Xurel; Horse-eye Jack.*
All warm seas, north to Virginia; west coast of Mexico; Panama, Clarion Island, and Chatham Island.
Caranx latus Agassiz, Spix, Pisc. Bras., 105, 1829, Brazil.

1344. Caranx medusicola, Jordan & Starks.
Mazatlan, Mexico.
Caranx medusicola Jordan & Starks, in Jordan, Fishes Sinaloa, 430, pl. 34, 1895, Mazatlan.

1345. Caranx lugubris Poey. *Tiñosa.*
Rocky islands in the tropics; Clarion Island (Revillagigedo Archipelago); West Indies; mid-Atlantic; mid-Pacific.
Caranx lugubris Poey, Memorias, II, 222, 1860, Cuba.

Caranx perquatus is diff. from C. crysos
may be C. caballus ? Nichols says no

Caranx [illegible]

? All one species.

[illegible]

Probably Sparaxis adscensionis = glaucus L.

1346. Caranx melampygus Cuvier & Valenciennes.
Pacific Ocean generally; Revillagigedo Islands.
Caranx melampygus Cuv. & Val., Hist. Nat. Poiss., IX, 116, 1833, East Indies.

Subgenus URASPIS Bleeker.
Uraspis Bleeker, Verhandl. Batav. Genootsch., XXIV, 1851 (*boops*).

1347. Caranx guara (Bonnaterre). "*Enxaréo.*"
Tropical parts of the Atlantic; Mediterranean; Africa; Brazil; Madeiras; South Pacific.
Scomber guara Bonnaterre, Encycl., 139, pl. 58, 1788, on a specimen from America in Jussieu's collection.

Genus 422. GNATHANODON Bleeker.
Gnathanodon Bleeker, Verh. Batav. Genootsch., XXIV, Makreele, 1851 (*speciosus*).

1348. Gnathanodon speciosus (Forskål). *Mojarra Dorada.*
Tropical parts of the Pacific Ocean; East Indies; Mazatlan to Panama.
Scomber speciosus Forskål, Descr. Anim., XII, 54, 1775, Red Sea.

Genus 423. CARANGOIDES Bleeker.
Carangoides Bleeker, Verh. Batav. Genootsch., XXIV, Makreele, 1851 (*plagiotænia*).

1349. Carangoides orthogrammus (Jordan & Gilbert).
Revillagigedo Islands; Pacific islands.
Caranx orthogrammus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 226, Sulphur Bay, Clarion Island (Revillagigedo Archipelago).

Genus 424. CITULA Cuvier.
Citula Cuvier, Règne Animal, ed. I, 315, 1817 (*armata*).

1350. Citula dorsalis (Gill). *Pámpano.*
Pacific Coast of tropical America; Mazatlan; Panama.
Carangoides dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 166, Panama.

Genus 425. ALECTIS Rafinesque.
Alectis Rafinesque, Analyse de la Nature, 1815 (substitute for *Gallus*).

1351. Alectis ciliaris (Bloch). *Thread-fish; Cobbler-fish; Sunfish.*
Tropical America on both coasts, ranging north to Cape Cod and Mazatlan, Florida Keys and Cuba.
Zeus ciliaris Bloch, Ichthyol., VI, 29, 1788, East Indies.

Genus 426. HYNNIS Cuvier & Valenciennes.
Hynnis Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 195, 1833 (*gorcensis*).

1352. Hynnis cubensis (Poey).
Cuba.
Hynnis cubensis Poey, Memorias, II, 235, 1860, Havana.

1353. Hynnis hopkinsi Jordan & Starks. *Pámpano.*
Puerto Viejo, near Mazatlan.
Hynnis hopkinsi Jordan & Starks, in Jordan, Fishes Sinaloa, 435, pl. 35, 1895, Mazatlan.

Genus 427. VOMER Cuvier & Valenciennes.
Vomer Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 189, 1833 (*brownii*).

1354. Vomer dorsalis Gill.
West Indies and west coast of Africa.
Vomer dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 436; after Günther.

1355. Vomer setipinnis (Mitchill). *Blunt-nosed Shiner; Jorobado;* Moonfish; Horsefish.
Both coasts of America, from Maine to Florida, and Cape San Lucas to Peru.
Zeus setipinnis Mitchill, Trans. Lit. Philos. Soc. N. Y. 1815, 384, New York.

1356. Vomer spixii (Swainson).
West Indies south to Brazil.
Platysomus spixii Swainson, Class. Fishes, etc., II, 250 and 406, 1839, Brazil: after Spix & Agassiz, pl. 57.

Genus 428. SELENE Lacépède. *Moonfishes.*
Selene Lacépède, Hist. Nat. Poiss., IV, 560, 1803 (*argentea* = young of *vomer*).

1357. Selene œrstedii Lütken.
Pacific Coast, Mazatlan to Panama.
Selene œrstedii Lütken, Spolia Atlantica, 144, 1880, Punta Arenas.

1358. Selene vomer (Linnæus). *Moonfish; Jorobado; Look-down; Horsehead.*
Tropical America, on both coasts; Cape Cod to Brazil; Lower California to Peru.
Zeus vomer Linnæus, Syst. Nat., ed. x, 266, 1758, America.

Genus 429. CHLOROSCOMBRUS Girard. *Casabes.*
Chloroscombrus Girard, Proc. Ac. Nat. Sci. Phila. 1858, 168 (*cœmopolita*).

1359. Chloroscombrus orqueta Jordan & Gilbert. *Orqueta; Xurel de Castilla.*
Pacific Coast of tropical America; Magdalena Bay to Panama.
Chloroscombrus orqueta Jordan & Gilbert, Proc. U. S. N. M. 1882, 646, Panama.

1360. Chloroscombrus chrysurus (Linnæus). *Casabe; Bumper.*
Cape Cod to Brazil; common on our South Atlantic Coast and in Cuba.
Scomber chrysurus Linnæus, Syst. Nat., ed. XII, 494, 1766, Charleston, S. C.

Genus 430. TRACHINOTUS Lacépède. *Pámpanos.*
Trachinotus Lacépède, Hist. Nat. Poiss., III, 79, 1802 (*falcatus*).

1361. Trachinotus glaucus (Bloch). *Gaff-topsail; Pámpano; Old Wife; Palometa.*
Tropical America, from Virginia to the Caribbean Sea.
Chætodon glaucus Bloch, Ichthyol., pl. 210, 1787, Martinique; on a figure by Plumier.

1362. Trachinotus rhodopus Gill. *Pampanito.*
Pacific Coast of tropical America, south to Panama.
Trachinotus rhodopus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 85, Cape San Lucas.

1363. Trachinotus falcatus (Linnæus). *Round Pámpano; Palometa; Permit of Indian River.*
East coast of United States, Cape Cod to Florida
Labrus falcatus Linnæus, Syst. Nat., ed. x, 284, 1758, America.

1364. Trachinotus rhomboides (Bloch). *Round Pámpano.*
West Indies to Brazil.
Chætodon rhomboides Bloch, Syst. Ichth., pl. 209, 1787, Martinique; on a drawing by Plumier.

1365. Trachinotus culveri Jordan & Starks.
Astillero, at Mazatlan, Mexico.
Trachinotus culveri Jordan & Starks in Jordan, Fishes Sinaloa, 439, pl. 36, 1895, Mazatlan.

1366. Trachinotus kennedyi Steindachner.
Tropical America; Magdalena Bay to Panama; Pacific Coast.
Trachinotus kennedyi Steindachner, Ichth. Beitr., III, 47, pl. VII, 1875, Magdalena Bay.

1367. Trachinotus goodei Jordan & Evermann. *Permit; Palometa; Great Pámpano.*
West Indies, north to southern Florida.
Trachinotus goodei, Jordan & Evermann, Fishes North and Middle America, 943, 1896, Key West, Fla.

Chloroscombrus celeuinus Osgood.
W. Indies

Zalocyon stilbe
Cebinon S.

S. palomeda. Regan
Lichia glauca, is a Trachinotus.

Is Lichia

L. glauca = part of Glaucus Klein =
Hypodic. Rafinesque

1368. Trachinotus argenteus Cuvier & Valenciennes.
Atlantic Coast.
Trachinotus argenteus Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 413, 1831, New York and Rio Janeiro.

1369. Trachinotus carolinus (Linnæus). *Common Pompano; Pámpano; Cobbler-fish.*
South Atlantic and Gulf coasts of United States; Cape Cod; West Indies; Brazil.
Gasterosteus carolinus Linnæus, Syst. Nat., ed. XII, 490, 1766, Carolina.

1370. Trachinotus paloma Jordan & Starks.
Cape San Lucas, Mazatlan, San Juan Lagoon.
Trachinotus paloma Jordan & Starks, in Jordan, Fishes Sinaloa, 437, 1895, Mazatlan, Mexico.

1371. Trachinotus cayennensis Cuvier & Valenciennes.
Cayenne.
Trachinotus cayennensis Cuvier & Valenciennes, Hist. Nat. Poiss., VIII, 417, 1831, Cayenne.

Family CXXVII. POMATOMIDÆ. The Bluefishes.

Genus 431. POMATOMUS Lacépède.
Pomatomus Lacépède, Hist. Nat. Poiss., IV, 436, 1802 (*skib*).

1372. Pomatomus saltatrix (Linnæus). *Bluefish; Snap Mackerel; Skipjack.*
Atlantic and Indian oceans.
Perca saltatrix Linnæus, Syst. Nat., ed. X, I, 293, 1758, Carolina.

Family CXXVIII. RACHYCENTRIDÆ. Sergeant-Fishes.

Genus 432. RACHYCENTRON Kaup.
Rachycentron Kaup, Isis, XIX, col. 89, 1826 (*typus*).

1373. Rachycentron canadum (Linnæus). *Sergeant-fish; Crab-eater; Cobia.*
In all warm seas; Atlantic Coast, north to Cape Cod.
Gasterosteus canadus Linnæus, Syst. Nat., ed. XII, 491, 1766, Carolina.

Family CXXIX. NOMEIDÆ.

Genus 433. NOMEUS Cuvier.
Nomeus Cuvier, Règne Animal, ed. 1, II, 315, 1817 (*gronovii*).

1374. Nomeus gronovii (Gmelin). *Portuguese Man-of-war-fish; Harder; Pastor.*
Tropical parts of the Atlantic and Indian oceans; Sargasso Sea; Florida; Bermuda; Woods Hole, Massachusetts.
Gobius gronovii Gmelin, Syst. Nat., ed. XIII, 1205, 1788, Tropical America; after Gronow.

Genus 434. PSENES Cuvier & Valenciennes.
Psenes Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 259, 1833 (*cyanophrys*).

1375. Psenes pellucidus Lütken.
Gulf Stream, at 32° 24′ N., 76° 55′ W., in 528 fathoms.
Psenes pellucidus Lütken, Spolia Atlantica, 516 (109), fig. 601 (198), 1880, Strait of Surabaja.

1376. Psenes cyanophrys Cuvier & Valenciennes.
Open sea; Atlantic, Pacific, and Indian oceans; Jamaica and Martinique.
Psenes cyanophrys Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 260, pl. 265, 1833, New Iceland.

1377. Psenes maculatus Lütken.
Open Atlantic.
Psenes maculatus Lütken, Spolia Atlantica, 110, 1880, open Atlantic, 39° N., 25° 4′ S., and between 34° and 27° W., in 600 to 700 fathoms.

1378. Psenes regulus Poey.

Coasts of Cuba; East Indies.

Psenes regulus Poey, Synopsis, 375, 1868, Cuba.

Family CXXX. CORYPHÆNIDÆ. The Dolphins.

Genus 435. CORYPHÆNA Linnæus.

Coryphæna Linnæus, Syst. Nat., ed. x, 261, 1758 (*hippurus*).

1379. Coryphæna hippurus Linnæus. *Common Dolphin; Dorado; Dourade.*

Pelagic to Cape Cod and northward, South Carolina to Texas.

Coryphæna hippurus Linnæus, Syst. Nat., ed. x, 261, 1758, open seas.

1380. Coryphæna equisetis Linnæus. *Small Dolphin.*

Open Atlantic, West Indies.

Coryphæna equisetis Linnæus, Syst. Nat., ed. x, 261, 1758 (misprinted *equiselis*), high seas; after Osbeck.

Family CXXXI. LAMPRIDÆ. The Mariposas.

Genus 436. LAMPRIS Retzius.

Lampris Retzius, Nya Handlung, III, 91, 1799 (*guttatus* = *luna*).

1381. Lampris ~~luna (Gmelin)~~ regius Bonnaterre. *Mariposa; Opah; San Pedro Fish; Cravo; Jerusalem Haddock; Glance-fish; Gudlax; Moonfish.*

Atlantic and Pacific; Madeira; Newfoundland; Maine; Cuba; Monterey.

Zeus luna Gmelin, Syst. Nat., ed. XIII, 1225, 1788, Normandy.

Family CXXXII. PTERACLIDIDÆ.

Genus 437. PTERACLIS Gronow.

Pteraclis Gronow, Acta Helvetica, VII, 44, 1772 (*relifers*).

1382. Pteraclis carolinus Cuvier & Valenciennes.

Coast of South Carolina.

Pteraclis carolinus Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 368, 1833, off coast South Carolina.

Family CXXXIII. BRAMIDÆ. The Pomfrets.

Genus 438. TARACTES Lowe.

Taractes Lowe, Proc. Zool. Soc. Lond. 1863, 82 (*asper*; probably young of *Brama longipinnis*).

1383. Taractes saussurii (Lunel).

Havana.

Brama saussurii Lunel, Revue du Genre Brama, Mém. Soc. Phys. Hist. Nat. Geneve, XVIII, 1865, 185, tab. 2, Cuba.

Genus 439. BRAMA Bloch & Schneider. *Pomfret.*

LEPODUS Rafinesque

Brama Bloch & Schneider, Syst. Ichth., 98, 1801 (*raii*).

Brama Klein 1777 = Abramis

1384. Brama agassizii Poey.

Cuba.

Brama agassizii Poey, Memorias, II, 204, 1860, Havana.

1385. Brama brevoortii Poey.

Cuba.

Brama brevoortii Poey, Memorias, II, 206, 1860, Havana.

1386. Brama raii (Bloch). *Pomfret; Castagnole; Rondanin.*

Open seas; Europe; Faroe Islands; Bermuda; Grand Banks; Pacific Coast, from Santa Catalina to Puget Sound.

Sparus raii Bloch, Ichthyol., tab. 273, 1791, after Ray, etc.

Luvarus. (S. Petro)

Pterachis gracilis J.

Rhombus alepidotus is probably valid.

Rhombus. Palometa + Poronotus valid.

Rhombus Klein. 1777 = Psetta
Peprilus comes in vice Rhombus.

Family CXXXIV. STEINEGERIDÆ.

Genus 440. STEINEGERIA Jordan & Evermann.

Steinegeria Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 467 (*rubescens*).

1387. Steinegeria rubescens Jordan & Evermann.

Gulf of Mexico.

Steinegeria rubescens Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 467, Snapper Banks, off Pensacola, Florida.

Family CXXXV. CENTROLOPHIDÆ. The Rudder-Fishes.

Genus 441. CENTROLOPHUS Lacépède *Black Ruffs.*

Centrolophus Lacépède, Hist. Nat. Poiss., IV, 441, 1803 (*niger*).

1388. Centrolophus niger (Gmelin). *Blackfish; Black Ruffe; Borlase.*

Coasts of southern Europe; Dennis, Massachusetts.

Perca niger Gmelin, Syst. Nat., 1321, 1788, Cornwall.

Genus 442. PALINURICHTHYS Bleeker.

Palinurichthys Bleeker, Enum. Spec. Pisc. Arch. Ind., 22, November, 1859, (*perciformis*).

1389. Palinurichthys perciformis (Mitchill). *Rudder-fish ; Log-fish.*

Atlantic Coast of North America, from Cape Hatteras to Maine; Cornwall.

Coryphena perciformis Mitchill, Am. Month. Mag., II, 1818, 244, N. Y. Harbor.

Family CXXXVI. STROMATEIDÆ. The Fiatolas.

Genus 443. RHOMBUS Lacépède. *Butter-fishes.*

Rhombus Lacépède, Hist. Nat. Poiss., II, 321, 1800 (*alepidotus*).

Subgenus RHOMPUS Lacépède. Peprilus.

1390. Rhombus paru (Linnæus). *Harvest-fish; Pappy-fish.*

South Atlantic Coast of United States, West Indies, Cape Cod to Jamaica and Brazil.

Stromateus paru Linnæus, Syst. Nat., ed. x, 248, 1758, Jamaica; based on Sloane.

1391. Rhombus xanthurus (Quoy & Gaimard).

Coast of South America, Cayenne to Montevideo.

Seserinus xanthurus Quoy & Gaimard, Voy. Freyc., Zool., 384, 1824, Brazil.

Subgenus PALOMETA Jordan & Evermann.

Palometa Jordan & Evermann, Fishes N. and M. A., 966, 1896 (*palometa*).

1392. Rhombus palometa (Jordan & Bollman).

Pacific Ocean, off Colombia.

Stromateus palometa Jordan & Bollman, Proc. U. S. N. M. 1889, 156, off coast of Colombia, 8° 16′ 30″ N., 79° 37′ 45″ W., at Albatross Station 2804.

1393. Rhombus medius (Peters). *Palometa.*

Pacific Coast of North America, Mazatlan to Panama.

Stromateus medius Peters, Berl. Monatsb., 1869, 707, Mazatlan, Mexico.

1394. Rhombus simillimus (Ayres). *California Pompano.*

Pacific Coast of United States, Puget Sound to San Diego.

Poronotus simillimus Ayres, Proc. Cal. Ac. Sci. 1860, 84, San Francisco.

Subgenus PORONOTUS Gill.

Poronotus Gill, Cat. Fish. E. Coast N. Am., 35, 1861 (*triacanthus*).

1395. Rhombus triacanthus (Peck). *Dollar-fish; Harvest-fish; Butter-fish; Lafayette.*

Nova Scotia to Florida.

Stromateus triacanthus Peck, Mem. Am. Ac., II, part 2, 48, pl. 2, fig. 2, 1800, *Piscataqua River, New* Hampshire.

Family CXXXVII. ICOSTEIDÆ. The Rag-Fishes.

Genus 444. ICICHTHYS Jordan & Gilbert.

Icichthys Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 305 (*lockingtoni*).

1396. Icichthys lockingtoni Jordan & Gilbert.

San Francisco, California.

Icichthys lockingtoni Jordan & Gilbert, Proc. U. S. Nat. Mus., III, 1880, 305, off San Francisco.

Genus 445. SCHEDOPHILUS Cocco.

Schedophilus Cocco, Giorn. Innom. Messina, Ann., III, 7, 57, 1834 (*medusophagus*).

1397. Schedophilus medusophagus Cocco.

Mid-Atlantic; Mediterranean; Ireland; Samoa.

Schedophilus medusophagus Cocco, Giorn. Innom. Messina, III, 7, 57, Messina.

Genus 446. ICOSTEUS Lockington.

Icosteus Lockington, Proc. U. S. Nat. Mus. 1880, 63 (*ænigmaticus*).

1398. Icosteus ænigmaticus Lockington.

Coast of California, Oregon, and Washington.

Icosteus ænigmaticus Lockington, Proc. U. S. Nat. Mus., III, 1880, 63, off San Francisco.

Genus 447. ACROTUS Bean.

Acrotus Bean, Proc. U. S. Nat. Mus. 1887, 631 (*willoughbyi*).

1399. Acrotus willoughbyi Bean.

On coast of Washington.

Acrotus willoughbyi Bean, Proc. U. S. Nat. Mus. 1887, 631, Quinaielt Agency, Washington.

Family CXXXVIII. ZAPRORIDÆ.

Genus 448. ZAPRORA Jordan.

1400. Zaprora silenus Jordan.

Known only from the harbor at Nanaimo, Vancouver Island, British Columbia.

Zaprora silenus Jordan, Proc. Cal. Ac. Sci., 1896, 202, harbor at Nanaimo, Vancouver Island.

Family CXXXIX. GRAMMICOLEPIDIDÆ.

Genus 449. GRAMMICOLEPIS Poey.

Grammicolepis Poey, Anal. Soc. Esp. Hist. Nat., II, 1873 (*brachiusculus*).

1401. Grammicolepis brachiusculus Poey.

Cuba.

Grammicolepis brachiusculus Poey, Anal. Soc. Esp. Hist. Nat., II, 1873, Cuba.

Family CXL. TETRAGONURIDÆ. The Square-Tails.

Genus 450. TETRAGONURUS Risso.

Tetragonurus Risso, Ichth. Nice, 347, 1810 (*curieri*).

1402. Tetragonurus cuvieri Risso. *Escolar de Natura; Courpata; Square-tail; Sea Raven.*

Nice; Toulon and Marseilles; Madeira.

Tetragonurus curieri Risso, Ichth. Nice, 347, 1810, Nice.

Regan makes a new order Malacichthyes for Leobleus &c
see p 495

Scicichthys Chenthi Gilbert.
Monterey.

ACROTIDÆ Good Family.

Family CXLI. PEMPHERIDÆ. The Deep-water Catalufas.

Genus 451. PEMPHERIS Cuvier & Valenciennes.

Pempheris Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 296, 1831 (*onalensis*).

1403. Pempheris mexicanus Cuvier & Valenciennes.

Pacific Coast of Mexico, Acapulco.

Pempheris mexicanus Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 308, 1831, Acapulco, Mexico.

1404. Pempheris schomburgki Müller & Troschel.

Barbados and Cuba.

Pempheris schomburgki Müller & Troschel, in Schomburgk's History of Barbados, 669, 1845, Barbados.

1405. Pempheris mulleri Poey. *Catalufa de la Alto.*

West Indies to Brazil; coast of Cuba.

Pempheris mulleri Poey, Memorias, II, 203, 1860, Cuba.

1406. Pempheris poeyi Bean.

Cuba.

Pempheris poeyi Bean, Proc. U. S. Nat. Mus. 1885, 229, Havana.

Group PERCOIDEA. The Perch-like Fishes.

Family CXLII. ELASSOMATIDÆ. Pigmy Sunfishes.

Genus 452. ELASSOMA Jordan.

Elassoma Jordan, Bull. U. S. Nat. Mus., X, 50, 1877 (*zonata*).

1407. Elassoma zonatum Jordan.

Southern Illinois to Texas and Alabama.

Elassoma zonata Jordan, Bull. U. S. Nat. Mus., X, 50, 1877, Little Red River, White County, Ark.

1408. Elassoma evergladei Jordan.

Swamps of southern Georgia and Florida, locally common in dark waters tributary to the Everglades.

Elassoma evergladei Jordan, Proc. U. S. Nat. Mus. 1884, 323, Indian, St. Johns, and Suwanee rivers, Florida.

Family CXLIII. CENTRARCHIDÆ. The Sunfishes.

Genus 453. POMOXIS Rafinesque. *Crappies.*

Pomoxis Rafinesque, Amer. Month. Magazine 1818, 41 (*annularis*).

1409. Pomoxis annularis Rafinesque. *Crappie; Bachelor; Sac-a-lait; New Light; Campbellite; Crapet.*

Eastern United States, from the Great Lakes south to Texas and west to Kansas and Nebraska.

Pomoxis annularis Rafinesque, Amer. Month. Mag., 1818, 41, Falls of the Ohio River.

1410. Pomoxis sparoides (Lacépède). *Calico Bass; Grass Bass; Barfish; Strawberry Bass.*

Great Lakes and Upper Mississippi Valley to New Jersey and southward to Florida, Louisiana, and Texas.

Labrus sparoides Lacépède, Hist. Nat. Poiss., III, 517, 1802, South Carolina.

Genus 454. CENTRARCHUS Cuvier & Valenciennes. *Round Bass.*

Centrarchus Cuvier & Valenciennes, Hist. Nat. Poiss., III, 84, 1829 (*irideus*).

1411. Centrarchus macropterus (Lacépède). *Round Sunfish; Flier.*

Lowland streams from Virginia southward to Florida and Louisiana; northward in the Mississippi Valley to southern Illinois.

Labrus macropterus Lacépède, Hist. Nat. Poiss., III, 447, 1802, Charleston, S. C.

Genus 455. ACANTHARCHUS Gill.

Acantharchus Gill, Amer. Jour. Sci. Arts, 1864, 92 (*pomotis*).

1412. Acantharchus pomotis (Baird). *Mud Sunfish.*

Southern New York to South Carolina.

Centrarchus pomotis Baird, Ninth Smithson. Report 1854, 325, New Jersey; New York.

Genus 456. AMBLOPLITES Rafinesque. *Rock Bass.*

Ambloplites Rafinesque, Ichth. Ohiensis, 33, 1820 (*ictheloides = rupestris*).

1413. Ambloplites rupestris (Rafinesque). *Common Rock Bass; Red-eye; Red-eye Perch; Goggle-eye.*

Vermont to Great Lakes region and Manitoba, south to Louisiana; very abundant west of the Alleghanies.

Bodianus rupestris Rafinesque, Am. Month. Mag., 1817, 120, Lakes of New York, Vermont, and Canada.

1413a. Ambloplites rupestris cavifrons Cope.

Roanoke River, Virginia.

Ambloplites carifrons Cope, Jour. Ac. Nat. Sci. Phila. 1868, 217, Roanoke River, Virginia.

Genus 457. ARCHOPLITES Gill.

Archoplites Gill, Proc. Ac. Nat. Sci. Phila. 1861, 165 (*interruptus*).

1414. Archoplites interruptus (Girard). *Sacramento Perch.*

Sacramento and San Joaquin rivers, California.

Centrarchus interruptus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 129, San Joaquin and Sacramento rivers, California.

Genus 458. CHÆNOBRYTTUS Gill.

Chænobryttus Gill, Amer. Jour. Sci. Arts 1864, 92 (*melanops = gulosus*).

1415. Chænobryttus gulosus (Cuvier & Valenciennes). *Warmouth; "Goggle-eye."*

Eastern United States from the Great Lakes to Florida and Texas, west to Kansas and the Dakotas; chiefly west or south of the Alleghanies; common in South Carolina.

Pomotis gulosus Cuvier & Valenciennes, Hist. Nat. Poiss., III, 498, 1829, Lake Pontchartrain and lagoons about New Orleans.

Genus 459. ENNEACANTHUS Gill.

Enneacanthus Gill, Amer. Jour. Sci. Arts 1864, 92 (*obesus*).

1416. Enneacanthus obesus (Baird).

Charles River, Massachusetts, to Florida.

Pomotis obesus Baird, Ninth Smithson. Report, 1854, 324, Beesley Point, New Jersey.

1417. Enneacanthus gloriosus (Holbrook).

Atlantic States, from New Jersey to Florida.

Bryttus gloriosus Holbrook, Jour. Ac. Nat. Sci. Phila. 1855, 51, Cooper River, South Carolina.

Genus 460. MESOGONISTIUS Gill.

Mesogonistius Gill, Amer. Jour. Sci. Arts 1864, 92 (*chætodon*).

1418. Mesogonistius chætodon (Baird). *Black-banded Sunfish.*

New Jersey to Maryland.

Pomotis chætodon Baird, Ninth Smithson. Report, 1854, 324, Cedar Swamp Creek, New Jersey.

Genus 461. APOMOTIS Rafinesque.

Apomotis Rafinesque, Jour. de Physique 1819, 420 (*cyanellus*).

1419. Apomotis cyanellus (Rafinesque). *Red-eye; Blue-spotted Sunfish; Green Sunfish; Little Red-eye.*

Great Lakes region to Mexico; very abundant from Ohio southwestward to the Rio Grande.

Lepomis cyanellus Rafinesque, Jour. de Physique 1819, 420, Ohio River.

1420. Apomotis ischyrus (Jordan & Nelson).

Upper Mississippi Valley.

Lepiopomus ischyrus Jordan & Nelson, Bull. U. S. Nat. Mus., x, 25, 1877, Illinois River, Illinois.

1421. Apomotis phenax Cope & Jordan.

Beesley Point, New Jersey.

Apomotis phenax Cope & Jordan, Bull. U. S. Nat. Mus., x, 26, 1877, Beesley Point, New Jersey; locality possibly erroneous.

1422. Apomotis punctatus (Cuvier & Valenciennes).

South Carolina to Florida.

Bryttus punctatus Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 462, 1831, Charleston, South Carolina.

1423. Apomotis symmetricus (Forbes).

Mississippi Valley; Illinois to Louisiana and Texas.

Lepomis symmetricus Forbes, in Jordan & Gilbert, Synopsis, 473, 1883, Illinois River, Illinois.

Genus 462. LEPOMIS Rafinesque. *The Sunfishes.*

Lepomis Rafinesque, Jour. de Physique 1819, 402 (*auritus*).

Subgenus LEPOMIS Rafinesque.

1424. Lepomis auritus (Linnæus). *Yellowbelly; Redbreast Bream.*

Maine to Louisiana; abundant in all streams east of the Alleghanies.

Labrus auritus Linnæus, Syst. Nat., ed. x, 283, 1758, Philadelphia.

1424a. Lepomis auritus solis (Cuvier & Valenciennes).

Virginia to Louisiana, in coastwise streams.

Pomotis solis Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 468, 1831, Lake Pontchartrain, Louisiana.

1425. Lepomis miniatus Jordan.

Mississippi Valley; southern Illinois to Louisiana and Texas.

Lepomis miniatus Jordan, Bull. U. S. Nat. Mus., x, 26, 1877, Tangipahoa River.

Subgenus XENOTIS Jordan.

Xenotis Jordan, Proc. Ac. Nat. Sci. Phila. 1877, 76 (*fallax*).

1426. Lepomis garmani Forbes.

Lower Wabash River basin.

Lepomis garmani Forbes, Bull. Ill. Lab. Nat. Hist., vol. II, art. 2, 135, January, 1885, Little Fox River at Phillipstown, and Wabash River and Drew Pond at Carmi, Illinois.

1427. Lepomis megalotis (Rafinesque). *Long-eared Sunfish.*

Michigan to Minnesota, South Carolina, and southward to the Rio Grande.

Ichthelis megalotis Rafinesque, Ichth. Ohiensis, 29, 1820, Kentucky, Licking, and Sandy rivers, Kentucky.

Subgenus HELIOPERCA Jordan.

Helioperca Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 335 (*pallidus*).

1428. Lepomis humilis (Girard). *Red-spotted Sunfish.*

Ohio and Kentucky to the Dakotas, Kansas, and Texas; locally abundant, especially in the lower Missouri Basin.

Girard, Proc. Ac. Nat. Sci. Phila. 1857, 201, Sugar Loaf

1429. Lepomis haplognathus Cope.

Monterey, Nuevo Leon, Mexico.

Lepomis haplognathus Cope, Proc. Amer. Philos. Soc. 1884 (1885), 168, Monterey, Nuevo Leon, Mexico.

1430. Lepomis macrochirus Rafinesque.

Ohio Valley and southwestward to Missouri and Kentucky.

Lepomis macrochira Rafinesque, Jour. de Physique 1819, 420, Ohio, Wabash, Green, and Licking rivers.

1431. Lepomis pallidus (Mitchill). *Blue-gill; Blue Bream; Blue Sunfish; Copper-nosed Bream; Dollardee.*

Great Lakes to Florida and the Rio Grande.

Labrus pallidus Mitchill, Trans. Lit. and Philos. Soc. N. Y. 1815, 407, New York.

Genus 463. EUPOMOTIS Gill & Jordan.

Eupomotis Gill & Jordan, Field and Forest 1877, 190 (*aureus* = *gibbosus*).

Subgenus XYSTROPLITES Jordan.

Xystroplites Jordan, in Cope, Proc. Amer. Philos. Soc., XVII, 1878, 67 (*gillii* = *pallidus*).

1432. Eupomotis pallidus (Agassiz).

Georgia to Texas.

Pomotis pallidus Agassiz, Amer. Jour. Sci. Arts 1854, 303 (name preoccupied in *Lepomis* by *Labrus pallidus* Mitchill, but not in *Eupomotis*).

Subgenus EUPOMOTIS Gill & Jordan.

1433. Eupomotis heros (Baird & Girard).

Southern Indiana to Florida and the Rio Grande Basin.

Pomotis heros Baird & Girard, Proc. Ac. Nat. Sci. Phila., March, 1854, 25, Rio Cibolo, Texas.

1434. Eupomotis holbrooki (Cuvier & Valenciennes).

Virginia to Florida.

Pomotis holbrooki Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 466, 1831, Charleston, South Carolina.

1435. Eupomotis euryorus (McKay).

Upper Great Lakes region.

Lepomis euryorus McKay, Proc. U. S. Nat. Mus. 1881, 89, Lake Huron at Fort Gratiot, Michigan.

1436. Eupomotis gibbosus (Linnæus). *Common Sunfish; Bream; Pumpkin-seed; Sunny; Tobacco-box.*

Great Lakes region to Maine, and southward to Florida, east of the Alleghanies.

Perca gibbosa Linnæus, Syst. Nat., ed. x, 293, 1758, Carolina; after *Perca fluviatilis gibbosa, ventre luteo*, of Catesby.

Genus 464. MICROPTERUS Lacépède. *Black Bass.*

Micropterus Lacépède, Hist. Nat. Poiss., IV, 325, 1802 (*dolomieu*).

1437. Micropterus dolomieu Lacépède. *Small-mouthed Black Bass.*

Lake Champlain to Manitoba and southward on both sides of the mountains to South Carolina and Arkansas.

Micropterus dolomieu Lacépède, Hist. Nat. Poiss., IV, 325, 1802, type locality uncertain, perhaps South Carolina.

1438. Micropterus salmoides (Lacépède). *Large-mouthed Black Bass; Oswego Bass; Green Bass; Bayou Bass.*

Rivers of the United States, from the Great Lakes and Red River of the North to Florida, Texas, and Mexico; west to the Dakotas, Nebraska, and Kansas.

Labrus salmoides Lacépède, Hist. Nat. Poiss., IV, 716, 1802, South Carolina.

Family CXLIV. KUHLIIDÆ.

Genus 465. KUHLIA Gill.

Kuhlia Gill, Proc. Ac. Nat. Sci. Phila. 1861, 48 (*ciliatus*).

1439. Kuhlia arge Jordan & Bollman.

Galapagos and Revillagigedo archipelagoes.

Kuhlia arge Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 159, Chatham Island, Galapagos Archipelago.

1440. Kuhlia xenura (Jordan & Gilbert).

Tropical seas; probably west coast of Central America.

Xenichthys xenurus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 454, type locality supposed to be San Salvador.

Family CXLV. PERCIDÆ. The Perches.

Genus 466. STIZOSTEDION Rafinesque. *American Pike-perches.*

Stizostedion Rafinesque, Ichth. Ohiensis, 23, 1820 (*salmonea*=*vitreum*).

Subgenus STIZOSTEDION Rafinesque.

1441. Stizostedion vitreum (Mitchill). *Wall-eyed Pike; Pike-perch; Dory; Glass-eye; Yellow Pike; Blue Pike; Jack Salmon; White-eye.*

Great Lakes region, Upper Mississippi, north to Assiniboia; east to Vermont and Pennsylvania, south to Georgia and Alabama, especially common northward.

Perca vitrea Mitchill, Supp. Am. Month. Mag., II, 1818, 247, Cayuga Lake, N. Y.

Subgenus CYNOPERCA Gill & Jordan.

Cynoperca Gill & Jordan, Bull. U. S. Nat. Mus., X, 44, 1877 (*canadense*).

1442. Stizostedion canadense (Smith). *Sauger; Sand Pike.*

Northeastern North America, from Vermont and the Great Lakes to Tennessee, Arkansas, and the upper Missouri; especially abundant northward.

Lucioperca canadense C. H. Smith, in Griffith's edition of Cuvier's Règne Animal, Fishes, 275, pl. 1, 1836, Canada.

1442a. Stizostedion canadense griseum (DeKay). *Sauger; Sand Pike; Gray Pike; Pickering.*

Great Lakes region and southwestward to Kentucky and Arkansas.

Lucioperca grisea DeKay, New York Fauna: Fishes, 19, 1842, New York.

1442b. Stizostedion canadense boreum (Girard).

Upper Missouri Basin.

Lucioperca borea Girard, Proc. Ac. Nat. Sci. Phila. 1857, 201, Fort Sarpi, Nebr.

Genus 467. PERCA (Artedi) Linnæus. *River Perch.*

Perca (Artedi) Linnæus, Syst. Nat., ed. X, I, 1758, and ed. XII, I, 481, 1766 (*fluviatilis*).

1443. Perca flavescens (Mitchill). *Yellow Perch; American Perch; Ringed Perch; Raccoon Perch.*

Fresh waters of the eastern United States, chiefly northward and eastward; abundant in the Great Lakes and in coastwise streams from Nova Scotia to North Carolina; common in the tributaries of the Upper Mississippi, especially in Iowa and Minnesota; unknown from central Ohio southwestward; not known from the Ohio River or the lower Missouri.

Morone flavescens Mitchill, Rept. Fish. N. Y., 18, 1814, near New York City.

Genus 468. PERCINA Haldeman. *Log Perches.*

Percina Haldeman, Jour. Ac. Nat. Sci. Phila., VIII, 1842, 330 (*nebulosa*)

1444. Percina rex (Jordan & Evermann).

Roanoke River, Roanoke, Virginia.

Etheostoma rex Jordan & Evermann, Proc. U. S. Nat. Mus. 1888, 357, Roanoke River, near Roanoke, Va.

1445. Percina caprodes (Rafinesque). *Log Perch; Rockfish; Hog-molly; Hogfish.*

Great Lakes and streams of the South and West from Quebec to Lake Superior, Iowa, and south to Texas, Mississippi, and the Rio Grande.

Sciæna caprodes Rafinesque, Amer. Month. Mag. 1818, 534, Ohio River.

1445a. Percina caprodes zebra (Agassiz). *Manitou Darter.*

Lakes of northern Indiana, Michigan, Wisconsin, and northward to Lake Superior.

Pileoma zebra Agassiz, Lake Superior, 308, 1850, Lake Superior.

Genus 469. HADROPTERUS Agassiz. *Black-sided Darters.*

Hadropterus Agassiz, Am. Jour. Sci. Arts 1854, 305 (*nigrofasciatus*).

Subgenus ALVORDIUS Girard.

Alvordius Girard, Proc. Ac. Nat. Sci. Phila. 1859, 68 (*maculatus*).

1446. Hadropterus phoxocephalus (Nelson).

Ohio to Iowa, south to Kentucky and Oklahoma, in sandy rivers; locally common.

Etheostoma phoxocephalum Nelson, Bull. Ill. Lab. Nat. Hist., 1, 35, 1876, Illinois River and its tributaries.

1447. Hadropterus macrocephalus (Cope).

West slope of the Alleghanies from Pennsylvania southward in mountain streams; known from Youghiogheny River, Pennsylvania; North Fork of Holston River, Saltville, Virginia; Middle Fork of Holston River; Glade Spring, Virginia; Big Sandy, Upper Green, and Cumberland rivers, Kentucky; Clinch River, Tennessee.

Etheostoma macrocephalum Cope, Trans. Amer. Philos. Soc. 1866, 400, Youghiogheny River, Pennsylvania.

1448. Hadropterus maculatus (Girard).

Fort Gratiot, Lake Huron.

Alvordius maculatus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 67, Fort Gratiot, Michigan.

1449. Hadropterus aspro (Cope & Jordan). *Black-sided Darter.*

Great Lakes region to the middle Missouri and north to Minnesota, southward through Missouri, Indiana, and Kentucky to Arkansas: especially common in the Ohio Valley.

Alvordius aspro Cope & Jordan, Proc. Ac. Nat. Sci. Phila. 1877, 51, White River, Indianapolis, Indiana; substitute for *Etheostoma blennioides* of Kirtland and Agassiz.

1450. Hadropterus guntheri (Eigenmann & Eigenmann).

Souris River, Winnipeg, south to Iowa.

Etheostoma guntheri Eigenmann & Eigenmann, Am. Nat., November, 1892, 962, Souris River, Winnipeg, and Cedar River near Cedar Rapids, Iowa.

1451. Hadropterus peltatus (Stauffer).

Southeastern Pennsylvania, southward to South Carolina in coastwise streams.

Etheostoma peltatum Stauffer, in Cope, Proc. Ac. Nat. Sci. Phila. 1864, 233, Conestoga Creek, near Lancaster, Pennsylvania.

1452. Hadropterus ouachitæ (Jordan & Gilbert).

Southern Indiana, western Kentucky, southwest to Arkansas, not rare; known from Patoka River, Indiana; lower Green and Obion rivers, Kentucky; Saline River, Arkansas.

Etheostoma (*Hadropterus*) *ouachitæ* Jordan & Gilbert, Proc. U. S. Nat. Mus. 1887, 49, Saline River, Benton, Arkansas, a tributary of the Washita.

1453. Hadropterus roanoka (Jordan & Jenkins).

Roanoke River, Virginia.

Etheostoma roanoka Jordan & Jenkins, Proc. U. S. Nat. Mus. 1888, 338, Roanoke River, near Roanoke, Virginia.

Subgenus ERICOSMA Jordan & Copeland.

Ericosma Jordan & Copeland, Bull. U. S. Nat. Mus., x, 8, 1877 (*evides*)

1454. Hadropterus evides (Jordan & Copeland).

Indiana, in the Wabash Basin, west to Cedar River, Iowa, and southward in Arkansas, Kentucky, and Tennessee; French Broad River and the Ozark region.

Alvordius evides Jordan & Copeland, Proc. Ac. Nat. Sci. Phila. 1877, 51, White River near Indianapolis, Indiana.

Subgenus SERRARIA Gilbert.

Serraria Gilbert, Proc. U. S. Nat. Mus. 1884, 205 (*scierus*).

1455. Hadropterus scierus Swain.

Northern Indiana to Tennessee and Texas.

Hadropterus scierus Swain, Proc. U. S. Nat. Mus. 1883, 252, Bean Blossom Creek, Monroe County, Indiana.

1455a. Hadropterus scierus serrula Jordan & Gilbert.

From southern Arkansas southward through eastern Texas.

Hadropterus scierus serrula Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 16, Red River, Fulton, Arkansas.

Subgenus HADROPTERUS Agassiz.

Hadropterus Agassiz, Am. Jour. Sci. Arts, XVII, 1854, 305 (*nigrofasciatus*).

1456. Hadropterus nigrofasciatus Agassiz. *Crawl-a-bottom.*

South Carolina to Louisiana.

Hadropterus nigrofasciatus Agassiz, Am. Jour. Sci. Arts, XVII, 1854, 305, Mobile, Alabama.

Genus 470. HYPOHOMUS Cope.

Hypohomus Cope, Proc. Amer. Phil. Soc. Phila. 1870, 449 (*aurantiacus*).

Subgenus SWAINIA Jordan & Evermann.

Swainia Jordan & Evermann, Fishes North and Middle America, 1040, 1896 (*squamatus*).

1457. Hypohomus squamatus (Gilbert & Swain).

Upper Tennessee River basin; known from Watauga and French Broad rivers.

Etheostoma (*Hadropterus*) *squamatus* Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 50, French Broad River at mouth of Wolf Creek, Tennessee.

Subgenus HYPOHOMUS Cope.

1458. Hypohomus aurantiacus (Cope).

Upper Tennessee Basin; North Fork of Holston, Clinch, Watauga, and French Broad rivers.

Cottogaster aurantiacus Cope, Jour. Ac. Nat. Sci. Phila. 1869, 211, North Fork of Holston River, Saltville, Virginia.

1459. Hypohomus cymatotænia (Gilbert & Meek).

Western Kentucky and southern Missouri.

Etheostoma (*Hadropterus*) *cymatotænia* Gilbert & Meek, Proc. U. S. Nat. Mus. 1887, 51, Niangua River and Osage Fork of the Gasconade near Marshfield, Missouri; Sac River near Greenfield, Missouri.

1460. Hypohomus nianguæ (Gilbert & Meek).

Niangua River, Missouri.

Etheostoma (*Hadropterus*) *nianguæ* Gilbert & Meek, Proc. U. S. Nat. Mus. 1887, 52, Niangua River near Marshfield, Missouri.

1461. Hypohomus spilotus (Gilbert).

Kentucky River.

Etheostoma nianguæ spilotum Gilbert, Proc. U. S. Nat. Mus. 1887, 53, Sturgeon Creek, a tributary of Kentucky River, near Travellers Rest, Owsley County, Kentucky.

Genus 471. COTTOGASTER Putnam.

Cottogaster Putnam, Bull. Mus. Comp. Zool., I, 5, 1863 (*tesselatum* Thompson, not of DeKay = *copelandi*).

Subgenus COTTOGASTER Putnam.

1462. Cottogaster uranidea Jordan & Gilbert.

Lower Wabash Basin to southern Missouri, south through Arkansas and Alabama to Escambia River, Florida.

Etheostoma (*Cottogaster*) *uranidea* Jordan & Gilbert, Proc. U. S. Nat. Mus. 1887, 48, Washita River, Arkadelphia, Arkansas.

1463. Cottogaster copelandi (Jordan).

Great Lakes region, from Lake Champlain to Lake Huron and south to the Black Warrior, westward to Missouri and through the Ozark region, where it is abundant, as also about Indianapolis in clear brooks.

Rheocrypta copelandi Jordan, Bull. U. S. Nat. Mus., x, 9, 1877, White River near Indianapolis, Indiana.

Subgenus IMOSTOMA Jordan.

Imostoma Jordan, Proc. Ac. Nat. Sci. Phila. 1877, 49 (*shumardi*).

1464. Cottogaster shumardi (Girard).

Michigan, Ohio, Indiana, and Illinois southward to Kentucky and Arkansas.

Hadropterus shumardi Girard, Proc. Ac. Nat. Sci. Phila. 1859, 100, Arkansas River near Fort Smith, Arkansas.

Genus 472. ULOCENTRA Jordan.

Ulocentra Jordan, Man. Vert. E. U. S., ed. 2, 223, 1878 (*atripinnis*).

1465. Ulocentra stigmæa (Jordan). *Speck.*

Tennessee and Arkansas to Georgia and Louisiana.

Boleosoma stigmæum Jordan, Ann. Lyc. Nat. Hist. N. Y. 1876, 311, small tributaries of Etowah and Oostanaula rivers near Rome, Georgia.

1466. Ulocentra gilberti Evermann & Thoburn.

Clinch River at Walker Ford, near Tazewell, Tennessee.

Ulocentra gilberti Evermann & Thoburn, in Jordan & Evermann, Fishes of North and Middle America, 1049, 1896, Clinch River at Walker Ford, near Tazewell, Claiborne County, Tennessee.

1467. Ulocentra verecunda (Jordan & Evermann).

Tributaries of Holston River, Virginia.

Etheostoma verecundum Jordan & Evermann, Proc. U. S. Nat. Mus. 1888, 360, Middle Fork of Holston River, about 5 miles south of Glade Spring, Virginia.

1468. Ulocentra histrio Jordan & Gilbert.

Southern Indiana, southwestward to Arkansas; known from the lower Wabash and tributaries, Green River, Kentucky, and Black, Poteau, and Washita rivers, Arkansas.

Etheostoma (*Ulocentra*) *histrio* Jordan & Gilbert, Proc. U. S. Nat. Mus. 1887, 47, Poteau River near Hackett City, Arkansas; Saline River at Benton, and Washita River at Arkadelphia, Arkansas.

1469. Ulocentra simotera (Cope).

Western Virginia, eastern Kentucky and Tennessee, in the basins of the Green, Cumberland, and Tennessee rivers, southward through Alabama to the Escambia River.

Hyostoma simoterum Cope, Jour. Ac. Nat. Sci. Phila. 1868, 215, Holston River and its tributaries, near Nashville, Tennessee.

1470. Ulocentra phlox (Cope).

Trinity River, Texas.

Boleosoma phlox Cope, Bull. U. S. Nat. Mus., XVII, 30, 1880, Trinity River at Fort Worth, Texas.

Genus 473. DIPLESION Rafinesque.

Diplesion Rafinesque, Ichth. Ohiensis, 37, 1820 (*blennioides*).

1471. Diplesion blennioides Rafinesque. *Green-sided Darter.*

Pennsylvania to South Dakota and Kansas, south to lower Alabama Basin.

Etheostoma (*Diplesion*) *blennioides* Rafinesque, Jour. de Physique 1819, 419, Ohio River.

Genus 474. BOLEOSOMA DeKay. *Tessellated Darters.*

Boleosoma DeKay, New York Fauna: Fishes, 20, 1842 (*tessellatum*=*olmstedi*).

1472. Boleosoma longimanus (Jordan).

James River, Virginia; recorded from North River at Loch Laird, Virginia; Buffalo Creek near Lexington, Virginia; Elk Creek near Natural Bridge, Virginia.

Etheostoma longimana Jordan, Proc. Ac. Nat. Sci. Phila. 1888, 179, tributary of James River, Virginia.

1473. Boleosoma podostemone (Jordan & Jenkins).

Roanoke River basin, Virginia.

Etheostoma podostemone Jordan & Jenkins, Proc. U. S. Nat. Mus. 1888, 359, Roanoke River at Roanoke, Salem, and Alleghany Spring, Virginia.

1474. Boleosoma nigrum (Rafinesque). *Johnny Darter.*

Eastern United States, Ohio Valley, Great Lakes region, and Upper Mississippi, west to Colorado and north to Manitoba.

Etheostoma nigrum Rafinesque, Ichth. Ohiensis, 37, 1820, Green River, Kentucky.

1474a. Boleosoma nigrum olmstedi (Storer). *Tessellated Darter; Grand Oranchee.*

Lake Ontario to Massachusetts and south to North Carolina east of the Alleghanies.

Etheostoma olmstedi Storer, Jour. Bost. Soc. Nat. Hist., IV, 1841, 61, pl. 5, fig. 2, Hartford, Connecticut.

1474b. Boleosoma nigrum effulgens (Girard).

Maryland to North Carolina.

Arlina effulgens Girard, Proc. Ac. Nat. Sci. Phila. 1859, 64, brooks and streams flowing into Potomac River.

1474c. Boleosoma nigrum vexillare (Jordan).

Tributaries of the James, Roanoke, and Rappahannock rivers.

Boleosoma vexillare Jordan, Proc. U. S. Nat. Mus. 1880, 237, Rappahannock River at Warrenton, Virginia.

1474d. Boleosoma nigrum maculaticeps Cope.

Upper waters of Catawba River, North Carolina.

Boleosoma maculaticeps Cope, Proc. Amer. Philos. Soc. 1870, 269, upper waters of Catawba River, North Carolina.

1474e. Boleosoma nigrum messæum (Cope).

Platte River near Fort Kearney, Nebraska.

Pœcilichthys messæus Cope, Proc. Ac. Nat. Sci. Phila. 1864, 232, Platte River near Fort Kearney, Nebraska.

1475. Boleosoma susanæ Jordan & Swain.

Basin of upper Cumberland River, Kentucky.

Boleosoma susanæ Jordan & Swain, Proc. U. S. Nat. Mus. 1883, 249, Wolf Creek and other tributaries of the Clear Fork of Cumberland River, near Pleasant View, Whitley County, Kentucky.

Subgenus VAILLANTIA Jordan.

Vaillantia Jordan, Bull. U. S. Nat. Mus., XII, 89, 1878 (*camurum*).

1476. Boleosoma camurum Forbes.

Indiana to Iowa and Mississippi, southwest to Houston, Texas.

Boleosoma camura Forbes, Bull. Ill. Lab. Nat. Hist., I, 40, 1878 (name preoccupied in *Etheostoma*, not in *Boleosoma*); Cache River and Clear Creek, Union County; Johnson County, and Pekin, Illinois.

Genus 475. CRYSTALLARIA Jordan & Gilbert.

Crystallaria Jordan & Gilbert, in Jordan, Cat. Fishes N. A., 78, 1885 (*asprellus*).

1477. Crystallaria asprella (Jordan).

Southern Indiana and Illinois to Arkansas and Alabama, chiefly in the larger clearer streams. Recorded from Ohio River at Rising Sun, Indiana; Wabash River at New Harmony, Vincennes, and Terre Haute; Green River, Kentucky; Choccolo Creek, Alabama, and Washita River, Arkansas; besides the original locality in Illinois.

Pleurolepis asprellus Jordan, Bull. Ill. Lab. Nat. Hist., II, 38, 1878, rocky tributary of Mississippi River in Hancock County, Illinois.

Genus 476. AMMOCRYPTA Jordan. *Sand Darters.*

Ammocrypta Jordan, Bull. U. S. Nat. Mus., x, 6, 1877 (*beanii*).

1478. Ammocrypta pellucida (Baird). *Sand Darter.*

Lake Erie to Minnesota, Kentucky, and Texas.

Pleurolepsis pellucidus Baird, in Agassiz, Bull. Mus. Comp. Zool., I, 5, 1863, no locality; the specimens from Black River, Ohio, the types of *Etheostoma pellucidum* Baird MS. 1853.

1478a. Ammocrypta pellucida clara Jordan & Meek.

Mississippi Valley, Wabash River west to central Iowa and Minnesota, and south to Arkansas and northern Texas.

Ammocrypta clara Jordan & Meek, Proc. U. S. Nat. Mus. 1885, 8, Des Moines River, Ottumwa, Iowa.

1478b. Ammocrypta pellucida vivax (Hay).

Mississippi and northwest through Arkansas and south to Texas.

Ammocrypta vivax Hay, Bull. U. S. Fish Com., II, 1882 (1883), 58, Pearl River, Jackson, Mississippi.

1479. Ammocrypta beanii Jordan.

Gulf States, Alabama to Louisiana.

Ammocrypta beanii Jordan, Bull. U. S. Nat. Mus., x, 5, 1877, Notalbany River, Tickfaw, Louisiana.

Genus 477. IOA Jordan & Brayton.

Ioa Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 88, 1878 (*vitrea*).

1480. Ioa vitrea (Cope).

Southeastern Virginia and eastern North Carolina.

Pœcilichthys vitreus Cope, Proc. Amer. Philos. Soc. Phila. 1870, 263, Walnut Creek, a tributary of Neuse River, Wake County, North Carolina.

1481. Ioa vigil Hay.

Pearl River, Jackson, Mississippi.

Ioa vigil Hay, Bull. U. S. Fish Com. II, 1882 (1883), 59, Pearl River, Jackson, Mississippi.

Genus 478. ETHEOSTOMA Rafinesque.

Etheostoma Rafinesque, Jour. de Physique 1819, 419 (*caprodes*, *blennioides*, *flabellaris*; first restricted by Agassiz, 1854, to *aspro*, wrongly identified as "*blennioides*"; restricted by Cope & Jordan 1877 to *flabellaris*).

Subgenus PŒCILICHTHYS Agassiz.

Pœcilichthys Agassiz, Am. Jour. Sci. Arts 1854, 305 (*variatus*).

1482. Etheostoma variatum Kirtland.

Ohio River basin, from western Pennsylvania to Kentucky.

Etheostoma variatum Kirtland, Zoology of Ohio, 168, 192, 1838, Mahoning River, Ohio.

Subgenus NANOSTOMA Putnam.

Nanostoma Putnam, in Jordan, Bull. U. S. Nat. Mus., x, 6, 1877 (*zonalis*); not *Nannostomus* Günther.

1483. Etheostoma swannanoa Jordan & Evermann.

Upper waters of the Tennessee River in Middle and South Forks of the Holston and the South Fork of the Swannanoa.

Etheostoma swannanoa Jordan & Evermann, Proc. U. S. Nat. Mus. 1888, 360, South Fork of Holston River, Holstein Mills, Virginia; Middle Fork of Holston River, Marion, Virginia, and South Fork of Swannanoa River, Black Mountain, North Carolina.

1484. Etheostoma thalassinum (Jordan & Brayton).

Santee River basin in North and South Carolina.

Nothonotus thalassinus Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 13, 1878, Reedy River, Greenville, South Carolina; Catawba River and tributaries in North Carolina; Ennoree River, Chick Springs, South Carolina, and Saluda River, Farr's Mill, South Carolina.

1485. Etheostoma inscriptum (Jordan & Brayton).

Oconee River, Georgia.

Nothonotus inscriptus Jordan & Brayton, Bull. U. S. Nat. Mus., XII, 34, 1878, Oconee River, Sulphur Springs, Hall County, Georgia.

1486. Etheostoma blennius Gilbert & Swain.

Northern Alabama, in streams tributary to the Tennessee River.

Etheostoma (*Rhothœca*) *blennius* Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 55, Cox Creek and Shoal Creek, tributary to Tennessee River, Florence, Alabama.

1487. Etheostoma rupestre Gilbert & Swain.

North River, a tributary of Black Warrior River, Alabama.

Etheostoma rupestre Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 57, North River, near Tuscaloosa, Alabama.

1488. Etheostoma elegans (Hay).

Chickasawha River, Mississippi.

Nanostoma elegans Hay, Proc. U. S. Nat. Mus. 1880, 493, shallow rocky branch of Chickasawha River, Enterprise, Mississippi.

1489. Etheostoma zonale (Cope).

Mississippi Valley from Ohio and northern Indiana (Kankakee River) west through Iowa and south through Kentucky and Tennessee into Alabama, Louisiana, and Arkansas.

Pœcilichthys zonalis Cope, Jour. Ac. Nat. Sci. Phila. 1868, 212, Holston River, Virginia.

1489a. Etheostoma zonale arcansanum Jordan & Gilbert.

Ozark region of Missouri and Arkansas.

Etheostoma zonale arcansanum Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 5, Spring River, Carthage, Missouri; James River, Marshfield, Missouri; Poteau River, Hackett City, Arkansas; Washita River, Arkadelphia, Arkansas, and Saline River, Benton, Arkansas.

Subgenus NOTHONOTUS Agassiz.

Nothonotus Agassiz, Bull. Mus. Comp. Zool., I, 3, 1863 (*maculatus*).

1490. Etheostoma camurum (Cope). *Blue-breasted Darter.*

Indiana and Ohio to Tennessee.

Pœcilichthys camurus Cope, Proc. Amer. Philos. Soc. Phila. 1870, 265, headwaters of Cumberland River in Tennessee.

1491. Etheostoma vulneratum (Cope).

French Broad River.

Pœcilichthys vulneratus Cope, Proc. Amer. Philos. Soc. Phila. 1870, 268, tributary of French Broad River, Warm Springs, North Carolina.

1492. Etheostoma maculatum Kirtland.

Ohio and Indiana southward through Kentucky and Tennessee to northern Alabama, in tributaries of the Wabash, Ohio, Cumberland, and Tennessee rivers.

Etheostoma maculata Kirtland, Jour. Bost. Soc. Nat. Hist. 1840, 276, Mahoning River, Ohio.

1493. Etheostoma cinereum Storer.

Tennessee and Cumberland rivers; Tennessee River at Florence, Alabama; Obeys River at Olympus, Tennessee; Rock Creek near Whitley Station, Kentucky.

Etheostoma cinerea Storer, Proc. Bost. Soc. Nat. Hist. 1845, 49, Florence, Ala.

1494. Etheostoma tessellatum Storer.

Florence, Alabama.

Etheostoma tessellata Storer, Proc. Bost. Soc. Nat. Hist. 1845, 48, Tennessee River at Florence, Alabama.

1495. Etheostoma rufilineatum (Cope).

Upper tributaries of the Tennessee, Cumberland, and Green rivers.

Pœcilichthys rufilineatus Cope, Proc. Amer. Philos. Soc. 1870, 267, Warm Springs Creek, French Broad River, Madison County, North Carolina.

1496. Etheostoma jordani Gilbert.

Tributaries of Coosa River in the Alabama River basin.

Etheostoma (*Nothonotus*) *jordani* Gilbert, Bull. U. S. Fish Com., IX, 1889 (1891), 156, pl. 43, fig. 3, Choccolo Creek, Oxford, Alabama, and Chestnut Creek, Verbena, Alabama.

Subgenus TORRENTARIA Jordan & Evermann.

Torrentaria Jordan & Evermann, Fishes N. and M. Am., 1080, 1896 (*australe*).

1497. Etheostoma sagitta (Jordan & Swain).

Cumberland River.

Pœcilichthys sagitta Jordan & Swain, Proc. U. S. Nat. Mus. 1883, 250, Wolf Creek, near Pleasant View, Whitley County, Kentucky.

1498. Etheostoma australe Jordan.

Chihuahua River, Mexico, in Rio Grande Basin.

Etheostoma australe Jordan, Proc. U. S. Nat. Mus. 1884, 362, Chihuahua River, Mexico; based on the types of *Diplesion fasciatus* Girard.

Subgenus NIVICOLA Jordan & Evermann.

Nivicola Jordan & Evermann, Fishes N. and M. Am., 1082, 1896 (*boreale*).

1499. Etheostoma boreale (Jordan).

St. Lawrence River at Montreal, Canada.

Pœcilichthys borealis Jordan, Proc. U. S. N. M. 1884, 477, Montreal, Canada.

Subgenus RAFINESQUIELLUS Jordan & Evermann.

Rafinesquiellus Jordan & Evermann, Fishes N. and M. Am., 1082, 1896 (*pottsii*).

1500. Etheostoma pottsii (Girard).

Streams of Chihuahua, Mexico, in Rio Grande Basin.

Diplesion pottsii (misprinted *potsii*) Girard, Proc. Ac. Nat. Sci. Phila. 1859, 102, tributaries of Chihuahua River, Mexico.

Subgenus OLIGOCEPHALUS Girard.

Oligocephalus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 67 (*lepidus*).

1501. Etheostoma iowæ Jordan & Meek.

Upper Mississippi Valley from Iowa and Nebraska north to Assiniboia; common northwestward.

Etheostoma iowæ Jordan & Meek, Proc. U. S. Nat. Mus. 1885, 10, Chariton River, Chariton, Iowa.

1502. Etheostoma jessiæ (Jordan & Brayton).

Indiana to Iowa and south to Mississippi and Texas.

Pœcilichthys jessiæ Jordan & Brayton, in Jordan, Man. Vert., ed. 2, 221, 1877. Chickamauga River, Ringgold, Georgia.

1503. Etheostoma luteovinctum Gilbert & Swain.

Stone River, Tennessee.

Etheostoma luteovinctum Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 58, Stone River near Nashville, Tennessee.

1504. Etheostoma lepidogenys Evermann & Kendall.

Rio Comal, Texas.

Etheostoma lepidogenys Evermann & Kendall, Bull. U. S. Fish Com., XII, 1892 (Feb. 6, 1894), 114, pl. 35, fig. 3, Rio Comal, New Braunfels, Texas.

1505. Etheostoma cœruleum Storer. *Blue Darter; Rainbow Darter; Soldier-fish.*

Mississippi Valley; Ohio Valley.

Etheostoma cœrulea Storer, Proc. Bost. Soc. Nat. Hist. 1845, 47.

1505a. Etheostoma cœruleum spectabile (Agassiz).

Mississippi Valley, Indiana to Missouri.

Pœcilichthys spectabilis Agassiz, Am. Jour. Sci. Arts 1854, 304, Osage River, Missouri.

1506. Etheostoma lepidum (Baird & Girard).

Streams of Arkansas, Texas, and Chihuahua.

Boleosoma lepida Baird & Girard, Proc. Ac. Nat. Sci. Phila. 1853, 388, upper tributaries of the Rio Nueces, Texas.

1507. Etheostoma tippecanoe Jordan & Evermann.

Tippecanoe River, Indiana.

Etheostoma tippecanoe Jordan & Evermann, Proc. U. S. Nat. Mus. 1890, 3, (figure that of *Etheostoma camurum* by mistake), Tippecanoe River, Marshland, Indiana.

1508. Etheostoma punctulatum (Agassiz).

Ozark region of southwestern Missouri.

Pœcilichthys punctulatus Agassiz, Am. Jour. Sci. Arts 1854, 304, Osage River, Missouri.

1509. Etheostoma cragini Gilbert.

Western portion of the Arkansas River basin, from Garden City, Kansas, to Canyon City, Colorado.

Etheostoma cragini Gilbert, Bull. Washburn College Laboratory for March and April, 1885, 99, small stream connecting the "Lake" at Garden City, Kansas, with Arkansas River.

1510. Etheostoma obeyense Kirsch.

Tributaries of Cumberland River in Clinton County, Kentucky.

Etheostoma obeyense Kirsch, Bull. U. S. Fish Com., X, 1890 (1892), 292, Indian Creek, Spring Creek, Smith Creek, and Albany Branch, all tributaries of Cumberland River in Clinton County, Kentucky.

1511. Etheostoma pagei Meek.

Spring branch, tributary to Neosho River, Neosho, Mo., in Arkansas Basin.

Etheostoma pagei Meek, Am. Nat. 1894, 957, spring branch on U. S. Fish Commission grounds, Neosho, Missouri.

1512. Etheostoma virgatum (Jordan).

Tributaries of Cumberland River in western Kentucky.

Pœcilichthys virgatus Jordan, Proc. U. S. Nat. Mus. 1879, 236, Rock Castle River, Livingston, Kentucky.

Subgenus CLARICOLA Jordan & Evermann.

Claricola Jordan & Evermann, Fishes N. and M. Amer., 1093, 1896 (*juliæ*).

1513. Etheostoma juliæ Meek.

Basin of White River, Missouri.

Etheostoma juliæ Meek, Bull. U. S. Fish Com., IX, 1889 (1891), 130, pl. 42, fig. 2, James River, near Springfield, Missouri.

1514. Etheostoma artesiæ (Hay).

Georgia to central Texas.

Pœcilichthys artesiæ Hay, Proc. U. S. Nat. Mus. 1880, 494, from a small branch of Catawba River, Artesia, Lowndes County, Mississippi.

1515. Etheostoma alabamæ (Gilbert & Swain).

Black Warrior and Big Catawba rivers, Alabama.

Etheostoma whipplei alabamæ Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 62, Black Warrior River near Morris and Tuscaloosa, Alabama.

1516. Etheostoma whipplii (Girard).

Lower Arkansas Basin, locally abundant in clear tributaries of the Saline, Washita, etc.

Boleichthys whipplii Girard, Proc. Ac. Nat. Sci. Phila. 1859, 103, Coal Creek, Arkansas.

1517. Etheostoma squamiceps Jordan.

Lower Wabash Valley, Indiana, through western Kentucky and Tennessee to Georgia and western Florida.

Etheostoma squamiceps Jordan, Bull. U. S. Nat. Mus., x, 11, 1877, Russellville, Kentucky.

Subgenus ETHEOSTOMA Rafinesque.

1518. Etheostoma flabellare Rafinesque. *Fan-tailed Darter.*

New York to Virginia, west to Iowa, and south to South Carolina and northern Alabama.

Etheostoma flabellaris Rafinesque, Jour. de Physique 1819, 419, tributaries of Ohio River.

1518a. Etheostoma flabellare cumberlandicum (Jordan & Swain).

Brooks in Cumberland Mountains tributary to Cumberland River.

Etheostoma cumberlandicum Jordan & Swain, Proc. U. S. Nat. Mus. 1883, 251, small streams of the Cumberland Mountains; Wolf Creek and Briar Creek near Pleasant View, Whitley County, Kentucky.

1518b. Etheostoma flabellare lineolatum (Agassiz).

Minnesota to northern Indiana and northern Missouri.

Catonotus lineolatus Agassiz, Am. Jour. Sci. Arts 1854, 305, small creek, near Quincy, Illinois.

Genus 479. ALVARIUS Girard.

Alvarius Girard, Proc. Ac. Nat. Sci. Phila. 1859, 101 (*lateralis*).

1519. Alvarius lateralis Girard.

Rio Grande.

Alvarius lateralis Girard, Proc. Ac. Nat. Sci. Phila. 1859, 101, mouth of Rio Grande.

Genus 480. PSYCHROMASTER Jordan & Evermann.

Psychromaster Jordan & Evermann, Fishes North and Middle America, 1099, 1896 (*tuscumbia*).

1520. Psychromaster tuscumbia (Gilbert & Swain).

Tennessee River basin in northern Alabama.

Etheostoma tuscumbia Gilbert & Swain, Proc. U. S. Nat. Mus. 1887, 63, streams flowing from the large spring at Tuscumbia, Alabama.

Genus 481. COPELANDELLUS Jordan & Evermann.

Copelandellus Jordan & Evermann, Fishes North and Middle America, 1100, 1896 (*quiescens*).

1521. Copelandellus quiescens (Jordan).

Swamps and streams of the lowlands from Virginia to Florida; known from Blackwater River, Zuni, Virginia; Allapaha River, Nashville, Georgia; and various streams in Florida.

Pœcilichthys quiescens Jordan, Proc. U. S. Nat. Mus. 1884, 478, tributary of Allapaha River, Nashville, Georgia.

Genus 482. BOLEICHTHYS Girard.

Boleichthys Girard, Proc. Ac. Nat. Sci. Phila. 1859, 103 (*exilis*).

1522. Boleichthys fusiformis (Girard).

Massachusetts to the Rio Grande and west to Minnesota.

Ieosoma fusiformis Girard, Proc. Bost. Soc. Nat. Hist. 1854, 41, Charles River, Massachusetts.

Upogon atricanda
Schlanom).

[illegible]

1523. Boleichthys exilis Girard.

Upper Missouri River basin and Red River of the North.

Boleichthys exilis Girard, Proc. Ac. Nat. Sci. Phila. 1859, 103, Little Muddy River, a tributary of the Upper Missouri.

Genus 483. MICROPERCA Putnam.

Microperca Putnam, Bull. Mus. Comp. Zool., I, 4, 1863 (*punctulata*).

1524. Microperca prœliaris (Hay).

Alabama and Mississippi, in lowland streams and ponds.

Alvarius prœliaris Hay, Proc. U. S. Nat. Mus. 1880, 496, small branch of the Tuscumbia River at Corinth, Mississippi.

1525. Microperca punctulata Putnam. *Least Darter.*

Northwestern States; Indiana, Michigan, and Minnesota, south to Arkansas; rare outside of tributaries of the Great Lakes.

Microperca punctulata Putnam, Bull. Mus. Comp. Zool., I, 4, 1863, various points in Michigan, Wisconsin, Illinois, and Alabama; those from Alabama were probably *M. prœliaris* (Hay).

1526. Microperca fonticola (Jordan & Gilbert).

Arkansas and Texas, in clear rocky streams; known only from Washita River at Arkadelphia; San Marcos River at San Marcos, Texas; Comal Creek at New Braunfels, Texas.

Alvarius fonticola Jordan & Gilbert, Proc. U. S. Nat. Mus. 1886, 23, San Marcos River at San Marcos, Texas.

Family CXLVI. CHEILODIPTERIDÆ. The King of the Mullets.

Genus 484. APOGON Lacépède. *King of Mullets.*

Apogon Lacépède, Hist. Nat. Poiss., III, 411, 1802 (*ruber* = *imberbis*).

1527. Apogon imberbis (Linnæus). *King of the Mullets; Alfoncino; Fucinita.*

Mediterranean and neighboring waters; one from Newport, Rhode Island, and one from the island of Fernando Noronha.

Mullus imberbis Linnæus, Syst. Nat., ed. X, 300, 1758, Malta; after Artedi.

1528. Apogon dovii Günther.

Mazatlan to Panama.

Apogon dovii Günther, Proc. Zool. Soc. Lond. 1861, 371, Panama.

1529. Apogon retrosella (Gill). *Cardenal.*

Pacific Coast of Mexico.

Amia retrosella Gill, Proc. Ac. Nat. Sci. Phila. 1862, 251, Cape San Lucas.

1530. Apogon maculatus (Poey). miami

Pensacola to Bahia; common on the "Snapper Banks"; often found in the stomachs of snappers and groupers.

Monoprion maculatus Poey, Memorias, II, 123, 1860, Cuba

1531. Apogon binotatus (Poey). miami

Cuba.

Amia binotata Poey, Repertorio, 234, 1867, Cuba.

1532. Apogon pigmentarius (Poey).

Cuba; common at Havana.

Monoprion pigmentarius Poey, Memorias, II, 123, 1860, Cuba.

Genus 485. APOGONICHTHYS Bleeker.

Apogonichthys Bleeker, Floris, 321, 1854 (*perdix*).

1533. Apogonichthys alutus (Jordan & Gilbert).

Snapper Banks off Pensacola and Tampa, Florida.

Apogon alutus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 279, and in *Synopsis, 931, 1883,* Snapper Banks off Pensacola, Fla.

1534. Apogonichthys stellatus Cope.
Bahamas.
Apogonichthys stellatus Cope, Trans. Amer. Philos. Soc. 1866, 400, Nassau, Bahama Islands.

1535. Apogonichthys puncticulatus Poey.
Cuba.
Apogonichthys puncticulatus Poey, Repertorio, II, 233, 1867, Cuba.

Genus 486. GLOSSAMIA Gill.
Glossamia Gill, Proc. Ac. Nat. Sci. Phila. 1863, 82 (*aprion*).

1536. Glossamia pandionis (Goode & Bean).
Deep water off Chesapeake Bay.
Apogon pandionis Goode & Bean, Proc. U. S. Nat. Mus. 1881, 160, deep water off Chesapeake Bay.

Genus 487. EPIGONUS Rafinesque.
Epigonus Rafinesque, Indice Ittiol. Sicil., 64, 1810 (*macrophthalmus*=*telescopum*).

1537. Epigonus occidentalis Goode & Bean.
Off Barbados.
Epigonus occidentalis Goode & Bean, Oceanic Ichthyology, 233, 1896, off Barbados.

Genus 488. CHEILODIPTERUS Lacépède.
Cheilodipterus Lacépède, Hist. Nat. Poiss., III, 539, 1802 (*saltatrix*, *macrodon*, etc.; restricted by Cuvier & Valenciennes in 1828 to *macrodon*).

1538. Cheilodipterus affinis Poey.
Cuba.
Cheilodipterus affinis Poey, Ann. Ac. Nat. Sci. N. Y., XI, 1876, 58, Havana.

Genus 489. AMIICHTHYS Poey.
Amiichthys Poey, in Jordan, Proc. U. S. Nat. Mus. 1886, 586 (*diapterus*).

1539. Amiichthys diapterus (Poey).
Cuba.
Genus? —— *diapterus* Poey, Synopsis, 305, 1861, Cuba.

Genus 490. SPHYRÆNOPS Gill.
Sphyrænops Gill, in Poey, Memorias, II, 349, 1861 (*bairdianus*).

1540. Sphyrænops bairdianus Poey.
Cuba.
Sphyrænops bairdianus Poey, Memorias, II, 350, 1861, Cuba.

Genus 491. SCOMBROPS Temminck & Schlegel.
Scombrops Temminck & Schlegel, Fauna Japonica, 118, 1842 (*cheilodipteroides*).

Subgenus LATEBRUS Poey.
Latebrus Poey, Memorias, II, 168, 1860 (*oculatus*).

1541. Scombrops oculatus (Poey). *Escolar Chino.*
Coast of Cuba.
Latebrus oculatus Poey, Memorias, II, 168, with plate, 1860, Cuba.

Genus 492. HYPOCLYDONIA Goode & Bean.
Hypoclydonia Goode & Bean, Oceanic Ichthyology, 236, fig. 237, 1896 (*bella*).

1542. Hypoclydonia bella Goode & Bean.
Gulf Stream.
Hypoclydonia bella Goode & Bean, Oceanic Ichthyology, 236, 1896, Gulf Stream at Albatross Stations 2314 in 159 fathoms, 2397 in 280 fathoms, 2401 in 142 fathoms, 2417 in 95 fathoms, 2418 in 90 fathoms, 2425 in 119 fathoms, and 2426 in 93 fathoms.

Astrapogon Fowler (stellatus)
Proc Phil. 1906. 3

Scupiria

?. 1543

1547. ? = 1146.

?. 1553 = 1556

Family CXLVII. CENTROPOMIDÆ. The Robalos.

Genus 493. CENTROPOMUS Lacépède. *Robalos.*

Centropomus Lacépède, Hist. Nat. Poiss., IV, 248, 1802 (*lucioperca, undecimalis,* etc.; restricted to *undecimalis* by Cuvier & Valenciennes).

1543. Centropomus viridis Lockington. *Robalo.*

Pacific Coast of Mexico; common from Gulf of California to Panama.

Centropomus viridis Lockington, Proc. Cal. Ac. Sci., VII, 1876 (1877), 110, off Ascension Island, Lower California.

1544. Centropomus undecimalis (Bloch). *Robalo; Sergeant-fish; Snook; Brochet de Mer.*

Coasts of Florida and Texas southward among the West Indies to Surinam or beyond.

Sciæna undecimalis Bloch, Ichthyol., VI, 60, pl. 303, 1792, Jamaica.

1545. Centropomus nigrescens Günther. *Robalo Prieto.*

Pacific Coast of tropical America; generally common from Mazatlan to Panama.

Centropomus nigrescens Günther, Fishes Central America, 407, 1869, Chiapas.

1546. Centropomus pedimacula Poey. *Constantino de las Aletas Prietas; Robalito de las Aletas Prietas.*

Both coasts of tropical America; common in Cuba, Jamaica, and south to Brazil and from Mazatlan to Panama.

Centropomus pedimacula Poey, Memorias, II, 122, 1860, Havana and Cienfuegos, Cuba.

1547. Centropomus grandoculatus Jenkins & Evermann.

Pacific Coast of Mexico.

Centropomus grandoculatus Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 139, Guaymas, Sonora.

1548. Centropomus cuvieri Bocourt.

Haiti.

Centropomus cuvieri Bocourt, Ann. Sc. Nat. Paris 1868, 91, Haiti.

1549. Centropomus mexicanus Bocourt.

Both coasts of Mexico; recorded from Gulf of Mexico and from Oaxaca.

Centropomus mexicanus Bocourt, Ann. Sc. Nat. Paris 1868, 90, Gulf of Mexico.

1550. Centropomus parallelus Poey.

Coasts of Cuba; San Domingo, Jamaica, Barbados, and Rio Chagres; Guiana, Pernambuco, and Bahia.

Centropomus parallelus Poey, Memorias, II, 120, 1860, Havana and Cienfuegos, Cuba.

1551. Centropomus pectinatus Poey.

Coasts of Cuba.

Centropomus pectinatus Poey, Memorias, II, 122, 1860, Havana and Cienfuegos, Cuba.

1552. Centropomus unionensis Bocourt.

Pacific Coast of Central America; rather common at Panama.

Centropomus unionensis Bocourt, Ann. Sc. Nat. Paris 1868, 90, La Union, San Salvador.

1553. Centropomus armatus Gill.

Pacific Coast of Central America; common from Chiapas to Panama.

Centropomus armatus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 163, Panama.

1554. Centropomus robalito Jordan & Gilbert. *Constantino; Robalito de las Aletas Amarillas.*

Pacific Coast of Mexico from Mazatlan to Panama.

Centropomus robalito Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 462, Mazatlan; Acapulco.

1555. Centropomus affinis Steindachner.

Coast of Brazil, north to Belize.

Centropomus affinis Steindachner, Ichth. Notizen, I, 1, pl. 1, fig. 1, 1884, Rio Janeiro and Cajahiba, Brazil; Demerara.

1556. Centropomus ensiferus Poey.
West Indies; generally common from Cuba to Surinam.
Centropomus ensiferus Poey, Memorias, II, 122, 1860, Havana.

Family CXLVIII. SERRANIDÆ. The Sea Basses.

Genus 494. ROCCUS Mitchill. *Striped Basses.*
Roccus Mitchill, Fishes of New York, 25, 1814 (*striatus* = *lineatus*).

Subgenus LEPIBEMA Rafinesque.
Lepibema Rafinesque, Ichth. Ohiensis, 23, 1820 (*chrysops*).

1557. Roccus chrysops (Rafinesque). *White Bass; White Lake-Bass.*
Great Lakes region, Upper Mississippi and Ohio valleys, south to Washita River.
Perca chrysops Rafinesque, Ichth. Ohiensis, 22, 1820, Falls of the Ohio.

Subgenus ROCCUS Mitchill.

1558. Roccus lineatus (Bloch). *Striped Bass; Rockfish; Rock.*
Atlantic coasts of North America from New Brunswick to Escambia River, Florida; introduced by the U. S. Fish Commission into Sacramento River, California.
Sciæna lineata Bloch, Ichth., IX, 53, pl. 305, 1792, "Mediterranean."

Genus 495. MORONE Mitchill. *White Perch.*
Morone Mitchill, Fishes of New York, 18, 1814 (*rufa* and *flavescens*); the genus properly a synonym of *Perca*.

1559. Morone interrupta Gill. *Yellow Bass.*
Lower Mississippi Valley north to Cincinnati, Terre Haute, and St. Louis.
Morone interrupta Gill, Proc. Ac. Nat. Sci. Phila. 1860, 118, St. Louis; New Orleans.

1560. Morone americana (Gmelin). *White Perch.*
Atlantic Coast of North America from Nova Scotia to South Carolina in brackish water, ascending streams, and frequently landlocked in ponds.
Perca americana Gmelin, Syst. Nat., I, III, 1306, 1788, New York; after Schöpf.

Genus 496. LIOPROPOMA Gill.
Liopropoma Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*aberrans*).

1561. Liopropoma aberrans Poey.
Coast of Cuba.
Perca aberrans Poey, Memorias, II, 125, 1860, Cuba.

Genus 497. CHORISTISTIUM Gill.
Chorististium Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*rubrum*).

1562. Chorististium rubrum (Poey).
Coast of Cuba.
Liopropoma rubra Poey, Memorias, II, 418, 1861, Havana.

Genus 498. STEREOLEPIS Ayres. *Jewfishes.*
Stereolepis Ayres, Proc. Cal. Ac. Sci. 1859, 28 (*gigas*).

1563. Stereolepis gigas Ayres. *California Jewfish.*
Coast of California, north to the Farallones.
Stereolepis gigas Ayres, Proc. Cal. Ac. Sci. 1859, 28, southern California.

Genus 499. POLYPRION Cuvier. *Wreckfishes.*
Polyprion Cuvier, in Valenciennes, Mém. Mus., XI, 265, 1824 (*cernium*).

1564. Polyprion americanus (Bloch & Schneider). *Wreckfish; Stone Bass; Cernier.*
Off coast of Europe; Gulf Stream.
Amphiprion americanus Bloch & Schneider, Syst. Ichth., 205, pl. 47, 1801, based on a drawing sent by Latham to Schneider representing some fish called in America "*gnom*"; called *Amphiprion australis* on pl. 47.

Labrax replaces Dicentrarchus
for L. lupus.

Chrysoperca (interrupta)
Forster. Proc. Phila 1917.

Genus 500. GONIOPLECTRUS Gill. *Spanish Flags.*

Gonioplectrus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236, 237 (*hispanum*).

1565. Gonioplectrus hispanus (Cuvier & Valenciennes). *"Spanish Flag"; Ouatilibi Espagnol; Biajaiba de lo Alto.*

West Indies; Cuba.

Plectropoma hispanus Cuv. & Val., Hist. Nat. Poiss., II, 396, 1828, Martinique.

Genus 501. PETROMETOPON Gill. *Enjambres.*

Petrometopon Gill, Proc. Ac. Nat. Sci. Phila. 1865, 105 (*guttatus* Poey = *cruentatus*).

1566. Petrometopon panamensis (Steindachner).

Panama.

Serranus panamensis Steindachner, Ichth. Beitr., IV, 1, with plate, 1871, Panama.

1567. Petrometopon cruentatus (Lacépède). *Enjambre; Coney; Rock Hind.*

West Indian fauna, Brazil to Florida Keys; very common on Cuba coast.

Sparus cruentatus Lacépède, Hist. Nat. Poiss., IV, 157, pl. 4, fig. 1, 1803, Martinique; on a copy of Plumier's drawing.

1567a. Petrometopon cruentatus coronatus (Cuvier & Valenciennes).

West Indies, north to Key West.

Serranus coronatus Cuv. & Val., Hist. Nat. Poiss., II, 371, 1828, Martinique.

Genus 502. BODIANUS Bloch. *Jacob Evertzens.* Emmacculus Gill

Bodianus Bloch, Ichthyologia, 1790 (*guttatus, bodianus*, etc., species with entire preopercle and spine on opercle). Cephalopholis B

1568. Bodianus tæniops (Cuvier & Valenciennes).

West coast of Africa, straying to Florida.

Serranus tæniops Cuv. & Val., Hist. Nat. Poiss., II, 370, 1828, Cape Verdes.

1569. Bodianus fulvus (Linnæus). *Guatirere; Nigger-fish; Yellow-fish; Butter-fish; Lemon-yellow Butter-fish; Guatirere Amarilla.*

West Indies; Bermuda and Florida Keys to Bahia.

Labrus fulvus Linnæus, Syst. Nat., ed. x, 287, 1758, Bahamas; after Catesby.

1569a. Bodianus fulvus ruber (Bloch & Schneider). *Red Guatirere; Ouatilibi; Rock Hind.*

West Indies, etc.; very common.

Gymnocephalus ruber Bloch & Schneider, Syst. Ichth., 346, pl. 67, 1801, on *Carauna* of Marcgrave; not *Epinephelus ruber* Bloch.

1568b. Bodianus fulvus punctatus (Linnæus). *Nigger-fish; Negro-fish; Black Guatirere.*

West Indies, etc.; everywhere common.

Perca punctata Linnæus, Syst. Nat., ed. x, 291, 1758, Bahamas; based on Catesby.

Subgenus MENEPHORUS Poey.

Menephorus Poey, Ann. Lyc. Nat. Hist. N. Y., x, 1869, 50 (*dubius*).

1570. Bodianus dubius (Poey).

Cuba.

Serranus dubius Poey, Memorias, II, 142, 1860, Cuba.

1571. Bodianus punctiferus (Poey).

Cuba.

Menephorus punctiferus Poey, Enumeratio, 21, 1875, Havana.

Subgenus ENNEISTUS Jordan & Evermann.

Enneistus Jordan & Evermann, Fishes N. and M. Am., 1147, 1896 (*acanthistius*).

1572. Bodianus acanthistius Gilbert.

Cape Lobos, eastern shore of Gulf of California.

Bodianus acanthistius Gilbert, Proc. U. S. N. M. 1891, 552, Cape Lobos, eastern shore of Gulf of California at Albatross Station 3017, in 58 fathoms.

Genus 503. EPINEPHELUS Bloch. *Groupers.*

Epinephelus Bloch, Ichthyologia, 1793 (after *marginalis*, *brunneus*, *merra*, *ruber*, etc.; restricted to *marginalis* by authors).

Subgenus SCHISTORUS Gill.

Schistorus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 237 (*mystacinus*).

1573. Epinephelus mystacinus (Poey). *Cherna de lo Alto.*

West Indies south to Brazil.

Serranus mystacinus Poey, Memorias, I, 52, tab. 10, fig. 1, 1851, Cuba.

Subgenus EPINEPHELUS Bloch.

1574. Epinephelus analogus Gill. *Cabrilla Pinta.*

Pacific Coast of tropical America; common on Pacific Coast of Mexico.

Epinephelus analogus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 163, Panama.

1575. Epinephelus adscensionis (Osbeck). *Rock Hind; Cabra Mora.*

West Indies; Florida Keys to Brazil; Ascension and St. Helena islands.

Trachinus adscensionis Osbeck, Iter Chin., etc., 1757, and English edition, 96, 1771, Ascension Island.

1576. Epinephelus guaza (Linnæus). *Meron; Méro; Guaza.*

Coasts of southern Europe and western Africa, ranging north to England, southward to Cape of Good Hope, and westward to Rio Janeiro and to Guiana.

Labrus guaza Linnæus, Syst. Nat., ed. x, 285, 1758, "Habitat in Pelago."

1577. Epinephelus labriformis (Jenyns).

Pacific Coast of tropical America; Cape San Lucas to Galapagos Islands.

Serranus labriformis Jenyns, Zool. Beagle, Fishes, 8, pl. 3, 1840, Galapagos.

1578. Epinephelus flavolimbatus Poey. *Yellow-finned Grouper.*

West Indies, north to Pensacola.

Epinephelus flavolimbatus Poey, Repertorio, I, 183, 1867, Cuba.

1579. Epinephelus niveatus (Cuvier & Valenciennes).

West Indies to Brazil, occasionally northward in the Gulf Stream as far as Newport, Rhode Island, and Woods Hole, Massachusetts.

Serranus niveatus Cuvier & Valenciennes, Hist. Nat. Poiss., II, 380, 1828, Brazil.

1580. Epinephelus striatus (Bloch). *Nassau Grouper; Hamlet; Cherna Criolla; Grouper; Rockfish.*

West Indian fauna; Key West to Brazil.

Anthias striatus Bloch, Ichthyologia, pl. 324, 1792, Martinique; on figure by Plumier.

1581. Epinephelus maculosus (Cuvier & Valenciennes). *Cabrilla; Red Hind.*

West Indies, occasionally north to Charleston, Florida Keys, and the Bermudas; south to Brazil.

Serranus maculosus Cuvier & Valenciennes, Hist. Nat. Poiss., II, 332, 1828, Martinique.

1582. Epinephelus drummond-hayi Goode & Bean. *Speckled Hind; John Paw.*

Bermudas, South Atlantic and Gulf Coast of United States; Charleston, South Carolina.

Epinephelus drummond-hayi Goode & Bean, Proc. U. S. Nat. Mus. 1878, 173, 174, Pensacola; Bermuda.

1583. Epinephelus morio (Cuvier & Valenciennes). *Red Grouper; Cherna Americana; Cherna de Vivero; Negre.*

Atlantic Coast of America, Virginia to Rio Janeiro.

Serranus morio Cuvier & Valenciennes, Hist. Nat. Poiss., II, 285, 1828, New York and San Domingo.

Epinephelus lightfooti Jordan
Proc Pinc, 1907 San Domingo
An alphestes,

Epinephelus ~~[illegible]~~ ~~[illegible]~~ Valbert,

Epinephelus phaeostigmeus Jordan
Hawaii. Proc. 1907.

1586. Belles =

Alphestes chlorophleuus (Cuv).

Alphestes zigtyrotis (Poey)

Dermatolepis falcifer. Overmount Kendall
Key West.

Genus 504. GARRUPA Jordan. *Black Groupers.*

Garrupa Jordan, Bull. U. S. Fish Com., VIII, 1888 (1890), 353 (*nigritus*).

84. Garrupa nigrita (Holbrook). *Black Jewfish; Black Grouper; Mero de lo Alto.*

South Atlantic and Gulf Coast of the United States, Charleston and Pensacola to Cuba and Brazil; straying to Sicily.

Serranus nigritus Holbrook, Ichth. South Carolina, ed. I, 173, pl. 25, fig. 11, 1856, Charleston, S. C.

Genus 505. PROMICROPS Gill. *Guasas.*

Promicrops Gill, in Poey, Synopsis, 287, 1868 (*guasa*).

85. Promicrops guttatus (Linnæus). *Guasa; Spotted Jewfish; Merou.*

Both coasts of tropical America, north to Florida and Gulf of California, south to Brazil.

Perca guttata Linnæus, Syst. Nat., X, 292, 1758; after Marcgrave, Willughby, etc.

Genus 506. ALPHESTES Bloch & Schneider.

Alphestes Bloch & Schneider, Syst. Ichthyol., 236, 1801 (*afer*).

86. Alphestes afer (Bloch). *Quaseta.*

West Indies; Cuba to Brazil.

Epinephelus afer Bloch, Ichthyologia, pl. 327, 1793, Acara, in Guinea.

87. Alphestes multiguttatus (Günther).

Pacific Coast of tropical America; Mazatlan to Panama.

Plectropoma multiguttatum Günther, Proc. Zool. Soc. Lond. 1866, 600, Panama.

Genus 507. DERMATOLEPIS Gill.

Dermatolepis Gill, Proc. Ac. Nat. Sci. Phila. 1861, 54 (*punctatus*).

Subgenus LIOPERCA Gill.

Lioperca Gill, Proc. Ac. Nat. Sci. Phila. 1862, 237 (*inermis*).

88. Dermatolepis inermis (Cuvier & Valenciennes).

West Indies.

Serranus inermis Cuvier & Valenciennes, Hist. Nat. Poiss., IX, 436, 1833, Antilles.

Subgenus DERMATOLEPIS Gill.

Dermatolepis Gill, Proc. Ac. Nat. Sci. Phila. 1861, 54 (*punctatus*).

89. Dermatolepis punctatus Gill.

West coast of Mexico; Cape San Lucas; the Venados; the Revillagigedos.

Dermatolepis punctatus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 54, Cape San Lucas.

Genus 508. MYCTEROPERCA Gill.

Mycteroperca Gill, Proc. Ac. Nat. Sci. Phila. 1863, 80 (*olfax*).

Subgenus ARCHOPERCA Jordan & Evermann.

Archoperca Jordan & Evermann, Fishes North and Middle America, 1171, 1896 (*boulengeri*).

90. Mycteroperca boulengeri Jordan & Starks. *Cabrilla Raizer; Mangrove Grouper.*

Mazatlan, Mexico.

Mycteroperca boulengeri Jordan & Starks, in Jordan, Fishes Sinaloa, 445, pl. 38, 1895, taken in the Astillero at Mazatlan, Mexico.

Subgenus TRISOTROPIS Gill.

Trisotropis Gill, Proc. Ac. Nat. Sci. Phila. 1865, 104 (*guttatus*=*venenosus*).

91. Mycteroperca venenosa (Linnæus). *Rockfish; Yellow-finned Grouper; Bonaci de Piedra.*

Bahamas, Florida Keys, and southward.

Perca venenosa Linnæus, Syst. Nat., ed. X, 292, 1758, Bahamas; after Catesby.

1591a. Mycteroperca venenosa apua (Bloch). *Bonaci Cardenal.*
West Indies, Florida Keys, and southward to Brazil.
Bodianus apua Bloch, Ichth., VII, 37, taf. 229, 1790, Brazil; after a drawing by Prince Maurice—the same used by Marcgrave.

1592. Mycteroperca bonaci (Poey). *Marbled Rockfish.*
West Indies, Pensacola to Brazil.
Serranus bonaci Poey, Memorias, II, 129, 1860, Cuba.

1592a. Mycteroperca bonaci xanthosticta Jordan & Swain.
Snapper Banks off Pensacola, Florida.
Mycteroperca bonaci xanthosticta Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 371, Snapper Banks off Pensacola, Florida.

1593. Mycteroperca jordani (Jenkins & Evermann). *Cabrilla de Astillero; Baya.*
Pacific Coast of Mexico from Gulf of California to Mazatlan.
Epinephelus jordani Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 149, Guaymas, Sonora.

1594. Mycteroperca microlepis (Goode & Bean). *Gag; Aquaji.*
South Atlantic and Gulf Coast of the United States, north to Beaufort, North Carolina, and Pensacola, Florida.
Trisotropus microlepis Goode & Bean, Proc. U. S. N. M. 1879, 141, west Florida.

1595. Mycteroperca interstitialis (Poey).
Coast of Cuba.
Serranus interstitialis Poey, Memorias, II, 127, 1860, Cuba.

1596. Mycteroperca dimidiata (Poey).
Coast of Cuba.
Serranus dimidiatus Poey, Memorias, II, 129, 1860, Cuba.

1597. Mycteroperca xenarcha Jordan.
Galapagos Archipelago; coast of Peru.
Mycteroperca xenarcha Jordan, Proc. Ac. Nat. Sci. Phila. 1887, 387, Galapagos Islands; Payta.

Subgenus PAREPINEPHELUS Bleeker.
Parepinephelus Bleeker, Systema Percarum Revisum, 257, 1875 (*acutirostris*).

1598. Mycteroperca rubra (Bloch). *Scirenga.*
West Indies, Brazil, Mediterranean Sea, and islands of the eastern Atlantic.
Epinephelus ruber Bloch, Ichthyologia, VII, 22, 1793, pl. 330, "Japan."

Subgenus XYSTROPERCA Jordan & Evermann.
Xystroperca Jordan & Evermann, Fishes North and Middle America, 1181, 1896 (*pardalis*).

1599. Mycteroperca pardalis Gilbert. *Cabrilla Piritita.*
Gulf of California.
Mycteroperca pardalis Gilbert, Proc. U. S. Nat. Mus. 1891, 551, La Paz Bay, Lower California.

Subgenus MYCTEROPERCA Gill.

1600. Mycteroperca olfax (Jenyns). *Yellow Grouper.*
James Island, Galapagos Archipelago; Panama.
Serranus olfax Jenyns, Zool. Beagle, Fishes, 9, pl. 4, 1840, Galapagos Islands.

1600a. Mycteroperca olfax ruberrima Jordan & Bollman.
Abingdon Island, Galapagos Archipelago.
Mycteroperca olfax ruberrima Jordan & Bollman, in Jordan & Eigenmann, Review Serranidæ, 367, 1890, Abingdon Island, Galapagos Archipelago.

1601. Mycteroperca rosacea (Streets). *Cabrilla Calamaria.*
Gulf of California.
Epinephelus rosaceus Streets, Bull. U. S. Nat. Mus., VII, 51, 1877, Angel Island, Gulf of California.

Mycteroperca.

Not a genera?

Mycleroperca hopkinsi Jordan Jamaica.

1602. Mycteroperca falcata (Poey). *Scamp; Bacalao; Abadejo.*
West Indies, north to Bermuda.
Serranus falcatus Poey, Memorias, II, 138, 1860, Havana.

1602a. Mycteroperca falcata phenax Jordan & Swain. *Scamp; Bacalao.*
Coasts of southern Florida, abundant about the Keys.
Mycteroperca falcata phenax Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 363, Key West, Florida.

1603. Mycteroperca venadorum Jordan & Starks. *Garlopa.*
West coast of Mexico at Mazatlan.
Mycteroperca venadorum Jordan & Starks, in Jordan, Proc. Cal. Ac. Sci. 1895, 446, Mazatlan, Mexico.

1604. Mycteroperca calliura Poey.
Coast of Cuba.
Mycteroperca calliura Poey, Repertorio, I, 181, 309, 1867, Cuba.

1605. Mycteroperca tigris (Cuvier & Valenciennes). *Bonaci Gato; Rockfish.*
West Indies, north to Bermuda.
Serranus tigris Cuv. & Val., Hist. Nat. Poiss., IX, 440, 1833, San Domingo.

1605a. Mycteroperca tigris camelopardalis (Poey).
West Indies.
Serranus camelopardalis Poey, Memorias, II, 132, 1860, Havana.

Genus 509. CRATINUS Steindachner.
Cratinus Steindachner, Ichth. Beitr., VII, 19, 1878 (*agassizii*).

1606. Cratinus agassizii Steindachner.
Galapagos Archipelago.
Cratinus agassizii Steindachner, Ichth. Beitr., VII, 19, 1878, Galapagos Islands.

Genus 510. HYPOPLECTRUS Gill. *Vacas.*
Hypoplectrus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*puella*).

1607. Hypoplectrus lamprurus (Jordan & Gilbert).
Panama.
Serranus lamprurus Jordan & Gilbert, Bull. U. S. Fish Com., I, 1881, 322, Panama.

1608. Hypoplectrus unicolor (Walbaum). *Vaca; Petit-nègre.*
West Indies, north to Florida Keys.
Perca unicolor Walbaum, Artedi Piscium, III, 352, 1792, locality unknown.

1608a. Hypoplectrus unicolor puella (Cuvier & Valenciennes). *Vaca.*
Martinique.
Plectropoma puella Cuvier & Valenciennes, Hist. Nat. Poiss., II, 405, pl. 37, 1828, Martinique.

1608b. Hypoplectrus unicolor vitulinus (Poey).
Havana.
Plectropoma vitulinum Poey, Memorias, I, 68, 1851, Havana.

1608c. Hypoplectrus unicolor pinnivarius Poey.
Havana.
Hypoplectrus pinnivarius Poey, Synopsis, 291, 1868, Havana.

1608d. Hypoplectrus unicolor guttavarius (Poey).
Havana.
Plectropoma guttavarium Poey, Memorias, I, 70, 1851, Havana.

1608e. Hypoplectrus unicolor gummigutta (Poey).
Havana.
Plectropoma gummigutta Poey, Memorias, I, 70, 1851, Havana.

1608f. Hypoplectrus unicolor crocotus (Cope).
West Indies.
Plectropoma crocota Cope, Trans. Am. Phil. Soc. Phila., XIV, 1871, 466, St. Martins, West Indies.

1608g. Hypoplectrus unicolor aberrans Poey.
Havana.
Hypoplectrus aberrans Poey, Synopsis, 291, 1868, Havana.

1608h. Hypoplectrus unicolor aocensus (Poey).
Havana.
Plectropoma aocensum Poey, Memorias, I, 72, 1851, Havana.

1608i. Hypoplectrus unicolor affinis (Poey).
Havana.
Plectropoma affine Poey, Memorias, II, 427, 1861, Havana.

1608j. Hypoplectrus unicolor chlorurus (Cuvier & Valenciennes).
Martinique.
Plectropoma chlorurum Cuv. & Val., Hist. Nat. Poiss., II, 406, 1828, Martinique.

1608k. Hypoplectrus unicolor nigricans (Poey).
Havana.
Plectropoma nigricans Poey, Memorias, I, 71, 1851, Havana.

1608l. Hypoplectrus unicolor indigo (Poey). *Añil.*
Havana.
Plectropoma indigo Poey, Memorias, I, 69, pl. 3, fig. 1, 1851, Havana.

1608m. Hypoplectrus unicolor bovinus (Poey).
Havana.
Plectropoma bovinum Poey, Memorias, I, 69, 1851, Havana.

1609. Hypoplectrus gemma Goode & Bean.
Florida Keys; known from one specimen from Garden Key, Florida.
Hypoplectrus gemma Goode & Bean, Proc. U. S. Nat. Mus. 1882, 428, Garden Key, Florida.

Genus 511. PARALABRAX Girard. *Cabrillas Verdes.*
Paralabrax Girard, Proc. Ac. Nat. Sci. Phila. 1856, 131 (*nebulifer*).

1610. Paralabrax nebulifer (Girard). *"Johnny Verde."*
Southern California, from Monterey to Magdalena Bay.
Labrax nebulifer Girard, Proc. Ac. Nat. Sci. Phila. 1854, 142, Monterey, Cal.

1611. Paralabrax maculatofasciatus (Steindachner). *Spotted Cabrilla.*
Pacific coast of America from Lower California to San Pedro and Mazatlan.
Serranus maculatofasciatus Steindachner, Ichth. Notizen, VII, 5, 1868, Mazatlan, Mexico.

1612. Paralabrax humeralis (Cuvier & Valenciennes).
Pacific Coast of South America; Panama to Juan Fernandez.
Serranus humeralis Cuv. & Val., Hist. Nat. Poiss., II, 246, 1828, Chile.

1613. Paralabrax clathratus (Girard). *Cabrilla; Rock Bass.*
Coast of southern California, from San Francisco to the Cerros Islands.
Labrax clathratus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 143, San Diego.

Genus 512. CENTROPRISTES Cuvier & Valenciennes. *Black Sea-bass.*
Centropristes Cuvier, Hist. Nat. Poiss., III, 36, 1829 (*nigricans*).

Subgenus CENTROPRISTES Cuvier & Valenciennes.

1614. Centropristes rufus Cuvier & Valenciennes.
Martinique.
Centropristes rufus Cuv. & Val., Hist. Nat. Poiss., III, 47, 1829, Martinique.

1615. Centropristes striatus (Linnæus). *Black Sea-bass; Blackfish; Tally-wag; Hannahill; Black Will; Black Harry.*
Atlantic Coast of United States, Cape Ann to northern Florida.
Labrus striatus Linnæus, Syst. Nat., ed. x, 285, 1758, "America"; description very brief, but not to be referred to any other fish.

1616. Centropristes ocyurus (Jordan & Evermann). *Gulf Sea-bass.*
Gulf of Mexico at Snapper Banks off Pensacola, Florida.
Serranus ocyurus Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 468, Snapper Banks off Pensacola, Florida.

Subgenus TRILOBURUS Gill.
Triloburus Gill, Cat. Fish. East Coast U. S., 30, 1861 (*trifurca*).

1617. Centropristes philadelphicus (Linnæus).
Coast of South Carolina.
Perca philadelphica Linnæus, Syst. Nat., ed. x, 291, 1758, America.

Genus 513. DIPLECTRUM Holbrook. *Squirrel-fishes.*
Diplectrum Holbrook, Ichthyology of South Carolina, ed. 1, 32, 1856 (*fasciularis*=*formosus*).

Subgenus HALIPERCA Gill.
Haliperca Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*bivittatus*=*radialis* and other species; restricted to *bivittatus* by Jordan & Gilbert, Syn., 535).

1618. Diplectrum sciurus Gilbert.
Gulf of California.
Diplectrum sciurus Gilbert, Proc. U. S. Nat. Mus. 1891, 550, Gulf of California, at Albatross stations Nos. 3014, 3021, 3026, and 3033, all in shallow water.

1619. Diplectrum radiale (Quoy & Gaimard). *Aguavina.*
Both coasts of tropical America, north to Havana and Guaymas; common on the coast of Brazil and in the Gulf of California.
Serranus radialis Quoy & Gaimard, Voyage Uranie, 316, 1824, Rio Janeiro.

1620. Diplectrum macropoma (Günther).
Pacific Coast of tropical America.
Centropristis macropoma Günther, Proc. Zool. Soc. Lond. 1864, 145, Panama.

1621. Diplectrum euryplectrum Jordan & Bollman.
Coast of Colombia, southwest of Panama.
Diplectrum euryplectrum Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 157, Pacific Ocean, off coast of Colombia.

Subgenus DIPLECTRUM Holbrook.

1622. Diplectrum formosum (Linnæus). *Squirrel-fish; Serrano; Sandfish.*
West Indies; common on the South Atlantic and Gulf coasts of the United States, from Charleston south to Montevideo.
Perca formosa Linnæus, Syst. Nat., ed. xii, 488, 1766, Carolina.

Genus 514. PRIONODES Jenyns.
Prionodes Jenyns, Voyage Beagle, Fishes, 46, 1840 (*fasciatus*).

Subgenus PRIONODES Jenyns.

1623. Prionodes æquidens (Gilbert).
Gulf of California.
Serranus æquidens Gilbert, Proc. U. S. Nat. Mus. 1890, 61, Gulf of California, at Albatross Station No. 2996, in 112 fathoms.

1624. Prionodes fusculus (Poey).
Cuba.
Centropristes fusculus Poey, Memorias, ii, 342, 1861, Havana.

1625. Prionodes phœbe (Poey). *Phœbe.*
West Indies, north to Pensacola, Florida.
Serranus phœbe Poey, Memorias, i, 55, pl. 2, fig. 3, 1851, Havana.

1626. Prionodes fasciatus Jenyns.
Pacific Coast of Mexico, Cape San Lucas to Galapagos Islands.
Prionodes fasciatus Jenyns, Voyage Beagle, Fishes, 46, 1840, Chatham Island, Galapagos Archipelago.

1627. Prionodes bulleri (Boulenger).

Coast of Jalisco, western Mexico.

Serranus bulleri Boulenger, Cat., I, 268, 1895, Las Peñas, Jalisco, Mexico.

Subgenus MENTIPERCA Gill.

Mentiperca Gill, Proc. Ac. Nat. Sci. Phila. 1862, 226 (*lucioperoanus*).

1628. Prionodes tigrinus (Bloch).

West Indies.

Holocentrus tigrinus Bloch, pl. 237, 1790, East Indies; after Loba, Thesaurus, III, pl. XXVII, fig. 5.

1629. Prionodes tabacarius (Cuvier & Valenciennes). *Jacome; Bout de Tabac.*

West Indies.

Centropristes tabacarius Cuvier & Valenciennes, Hist. Nat. Poiss., III, 44, 1829, Martinique.

1630. Prionodes flavescens (Cuvier & Valenciennes).

Martinique.

Serranus flavescens Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 506, 1830, Martinique.

1631. Prionodes lucioperoanus (Poey).

Coast of Cuba.

Serranus lucioperoanus Poey, Memorias, I, 56, pl. 9, fig. 1, 1851, Havana.

1632. Prionodes stilbostigma Jordan & Bollman.

Coast of Ecuador.

Prionodes stilbostigma Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 158, Pacific Ocean off the coast of Ecuador, 0° 50′ S., 89° 36′ W., in 45 fathoms, at Albatross Station 2809.

Genus 515. DULES Cuvier.

Dules Cuvier, Règne Animal, ed. II, vol. II, 147, 1829 (*auriga*).

1633. Dules subligarius (Cope).

South Atlantic coasts of United States; known from Beaufort, Charleston, and Pensacola Snapper Banks.

Centropristis subligarius Cope, Proc. Ac. Nat. Sci. Phila. 1870, 120, Pensacola, Florida.

1634. Dules dispilurus (Günther). *Grassy-ground Rockfish.*

Trinidad; Jamaica.

Centropristis dispinosus Günther, Proc. Zool. Soc. Lond. 1867, 99, Trinidad.

1635. Dules auriga Cuvier & Valenciennes.

Coast of Brazil and Uruguay, occasionally northward.

Dules auriga Cuvier & Valenciennes, Hist. Nat. Poiss., III, 112, pl. 51, 1829, Brazil.

Genus 516. PARANTHIAS Guichenot.

Paranthias Guichenot, Ann. Soc. Linn. Maine-et-Loire, X, 1868 (*furcifer* = *creolus*).

1636. Paranthias furcifer (Cuvier & Valenciennes). *Rabirubia de lo Alto; Creole-fish.*

Both coasts of tropical America, Cuba to Brazil, Cape San Lucas to the Galapagos Archipelago.

Serranus furcifer Cuvier & Valenciennes, Hist. Nat. Poiss., II, 264, 1828, Brazil.

Genus 517. HEMIANTHIAS Steindachner.

Hemianthias Steindachner, Ichth. Beitr., I, 4, 1874 (*peruanus*).

1637. Hemianthias peruanus Steindachner.

Coasts of Peru and Chile, occasionally northward; off the coast of Lower California.

Anthias (*Hemianthias*) *peruanus* Steindachner, Ichth. Beitr., I, 4, 1874, Paita, Truiillo.

not Dulus a genus of birds
Hence F. Eudulus Forster
& Coelodulus Forster. 1907
Dubbegonius.

1638. Hemianthias vivanus (Jordan & Swain).

Gulf of Mexico; Snapper Banks between Pensacola and Tampa, Florida.
Anthias vivanus Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 544, from stomach of a red snapper taken at the Snapper Banks off Pensacola. Florida.

Genus 518. PRONOTOGRAMMUS Gill.

Pronotogrammus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 81 (*multifasciatus*).

1639. Pronotogrammus eos Gilbert.

Pacific Coast of tropical America.
Pronotogrammus eos Gilbert, Proc. U. S. Nat. Mus. 1890, 62, west coast of Mexico, at Albatross Station 2996, in 112 fathoms.

1640. Pronotogrammus multifasciatus Gill.

Cape San Lucas, Lower California.
Pronotogrammus multifasciatus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 81, Cape San Lucas, Lower California.

Genus 519. ANTHIAS Bloch. *Barbiers.*

Anthias Bloch, Auslanische Fische, VI, 97, 1792 (*anthias*).

1641. Anthias asperilinguis Günther.

Atlantic Coast of South America; only the type known.
Anthias asperilinguis Günther, Cat., I, 89, 1859, South America; probably Guiana.

Genus 520. OCYANTHIAS Jordan & Evermann.

Ocyanthias Jordan & Evermann, Fishes North and Middle America, 1227, 1896 (*martinicensis*).

1642. Ocyanthias martinicensis (Guichenot).

West Indies.
Aylopon martinicensis Guichenot, Anthiani, Ann. Linn. Soc., vol. X, 1868, Martinique.

Genus 521. GRAMMA Poey.

Gramma Poey, Synopsis, 296, 1868 (*loreto*).

1643. Gramma loreto Poey.

Matanzas, Cuba; only the type known.
Gramma loreto Poey, Synopsis, 296, 1868, Matanzas, Cuba.

Genus 522. RYPTICUS Cuvier. *Soapfishes.*

Rypticus Cuvier, Règne Animal, ed. 2, vol. II, 144, 1829 (*saponaceus*).

1644. Rypticus zanti Gill.

Pacific Coast of Mexico, from Cape San Lucas to Colima and Mazatlan.
Rhypticus zanti Gill, Proc. Ac. Nat. Sci. Phila. 1862, 250, Cape San Lucas.

1645. Rypticus bicolor (Valenciennes).

Galapagos Archipelago.
Smecticus bicolor Valenciennes, Voyage de la Vénus, Poissons, 307, pl. 2, fig. 2, 1855, Galapagos Archipelago.

1646. Rypticus saponaceus (Bloch & Schneider). *Soapfish; Jabon; Jaboncillo.*

West Indies; Pensacola to west Africa and Brazil.
Anthias saponaceus Bloch & Schneider, Syst. Ichth., 310, 1801, Havana.

1647. Rypticus arenatus Cuvier & Valenciennes.

West Indies and coast of Brazil; recorded from Jamaica, Trinity, Barbados, and St. Thomas.
Rypticus arenatus Cuvier & Valenciennes, Hist. Nat. Poiss., III, 65, pl. 45, 1829, Brazil.

1648. Rypticus coriaceus (Cope). *Black Soapfish.*

West Indies; recorded from St. Martins and Jamaica.
Eleutheractis coriaceus Cope, Trans. Amer. Philos. Soc. 1870, 487, St. Martins.

Subgenus PROMICROPTERUS Gill.

Promicropterus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 53 (*maculatus*).

1649. Ryptious bistrispinus (Mitchill).

South Atlantic Coast of United States; frequent off Charleston, Pensacola, and Key West; occasional as far north as Newport, Rhode Island.

Bodianus bistrispinosus Mitchill, Am. Monthly Magazine and Crit. Review, February, 1818, 247, Straits of Bahama.

1650. Ryptious nigripinnis Gill.

Pacific Coast of tropical America, Cape San Lucas to Panama.

Rhyptious nigripinnis Gill, Proc. Ac. Nat. Sci. Phila. 1861, 53, Panama.

Family CXLIX. LOBOTIDÆ. The Triple-tails.

Genus 523. LOBOTES Cuvier.

Lobotes Cuvier, Règne Animal, ed. 2, II, 177, 1829 (*erate*=*surinamensis*).

1651. Lobotes surinamensis (Bloch). *Flasher; Triple-tail;. Dormeur.*

Atlantic Coast from Cape Cod to Surinam; Mediterranean.

Holocentrus surinamensis Bloch, Ichth., pl. 243, 1790, Surinam.

1652. Lobotes pacificus Gilbert.

Known only from Panama.

Lobotes pacificus Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

Family CL. PRIACANTHIDÆ. Catalufas.

Genus 524. PRIACANTHUS Cuvier.

Priacanthus Cuvier, Règne Animal, ed. I, 281, 1817 (*macrophthalmus*).

1653. Priacanthus arenatus Cuvier & Valenciennes. *Catalufa.*

West Indies, south to Brazil; occasionally northward in the Gulf Stream to Newport and Woods Hole.

Priacanthus arenatus Cuvier & Valenciennes, Hist. Nat. Poiss., III, 101, 1829, Brazil.

1654. Priacanthus cruentatus (Lacépède). *Big Eye; Catalufa.*

West Indies to St. Helena and the Canaries.

Labrus cruentatus Lacépède, Hist. Nat. Poiss., III, 522, 1800, Martinique; from a copy by Aubriet of a plate made by Plumier at Martinique.

Genus 525. PSEUDOPRIACANTHUS Bleeker.

Pseudopriacanthus Bleeker, Versl. Ak. Wet. Amsterd. (2), III, 241, 1869 (*niphonius*).

1655. Pseudopriacanthus serrula (Gilbert).

Pacific Coast of Colombia.

Priacanthus serrula Gilbert, Proc. U. S. Nat. Mus. 1890, 450, west coast of Colombia, at Albatross Station 2797.

1656. Pseudopriacanthus altus (Gill).

West Indies, north to Pensacola and Charleston.

Priacanthus altus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 132, Narragansett Bay.

Family CLI. LUTIANIDÆ. The Snappers.

Genus 526. HOPLOPAGRUS Gill.

Hoplopagrus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 253 (*guntheri*).

1657. Hoplopagrus guntheri Gill. *Pargo.*

Pacific Coast of tropical America, from Guaymas to Panama.

Hoplopagrus guntheri Gill, Proc. Ac. Nat. Sci. Phila. 1862, 253, Cape San Lucas, Lower California.

Abundant. Brampton N.C.

fen Verrucosa.

Procacanthus [illegible]

Revolving [illegible]

(Prep. of [illegible] layers [illegible]

edge rough [illegible]

Genus 527. EVOPLITES Gill.

Evoplites Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*pomacanthus*=young of *kasmira*).

1658. Evoplites viridis (Valenciennes).

Rocky islands of the eastern Pacific; known from Galapagos, Tres Marias, and Revillagigedo islands.

Diacope viridis Valenciennes, Voyage de la Vénus, 303, pl. 1, fig. 2 (very bad), 1845, Galapagos Islands.

Genus 528. NEOMÆNIS Girard. *Snappers.*

Neomænis Girard, U. S. Mex. Boun. Sur., Zool., 18, 1859 (*emarginatus*=*griseus*).

Subgenus NEOMÆNIS Girard.

1659. Neomænis jordani Gilbert.

Panama.

Neomænis jordani Gilbert, Fishes Panama, Proc. Cal. Ac. Sci. 1896, Panama.

1660. Neomænis novemfasciatus (Gill). *Pargo Prieto; Pargo Mareño; Pargo Negro.*

Pacific Coast of tropical America; Cape San Lucas; Guaymas; Mazatlan; Punta Arenas; San Blas; Panama.

Lutjanus novemfasciatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 251, Cape San Lucas, Lower California.

1661. Neomænis cyanopterus (Cuvier & Valenciennes). *Cubera.*

West Indies to Brazil.

Mesoprion cyanopterus Cuv. & Val., Hist. Nat. Poiss., II, 472, 1828, Brazil.

1662. Neomænis griseus (Linnæus). *Gray Snapper; Mangrove Snapper; Caballerote; Lawyer.*

West Indies; ranging from New Jersey to Brazil.

Labrus griseus Linnæus, Syst. Nat., ed. x, 283, 1758; after Catesby.

1663. Neomænis jocu (Bloch & Schneider). *Dog Snapper; Jocú.*

West Indies, north to Florida Keys, south to Bahia.

Anthias jocu Bloch & Schneider, Syst. Ichth., 310, 1801, Cuba; after Parra.

1664. Neomænis apoda (Walbaum). *Schoolmaster; Caji.*

West Indies, north to Key West, south to Bahia.

? *Perca apoda* Walbaum, Artedi Piscium, 351, 1792; based on the "*Schoolmaster*" of Catesby.

1665. Neomænis argentiventris (Peters). *Pargo Amarillo.*

Pacific Coast of tropical America.

Mesoprion argentiventris Peters, Berlin. Monatsber. 1869, 704, Mazatlan.

1666. Neomænis lutjanoides (Poey).

Cuba.

Ocyurus lutjanoides Poey, Ann. Lyc. Nat. Hist., IX, 1871, 319, Cuba.

1667. Neomænis buccanella (Cuvier & Valenciennes). *Sesi de lo Alto; Oreille Noire; Boucanelle; Blackfin Snapper.*

West Indies; Havana.

Mesoprion buccanella Cuvier & Valenciennes, Hist. Nat. Poiss., II, 455, 1828, Martinique.

1668. Neomænis vivanus (Cuvier & Valenciennes). *Pargo de lo Alto; Silk Snapper.*

West Indies; Havana.

Mesoprion vivanus Cuv. & Val., Hist. Nat. Poiss., II, 454, 1828, Martinique.

1669. Neomænis aya (Bloch). *Red Snapper; Pargo Colorado; Pargo Guachinango; Acara Aya.*

Long Island to Brazil; Gulf of Mexico, and about Yucatan.

Bodianus aya Bloch, Ichthyol., pl. 227, 1790, Brazil; after Marcgrave.

1670. Neomænis analis (Cuvier & Valenciennes). *Mutton-fish; Pargo; Pargo Criollo.*

West Indies; Pensacola to Brazil.

Mesoprion analis Cuv. & Val., Hist. Nat. Poiss., II, 452, 1828, San Domingo.

1671. Neomænis colorado (Jordan & Gilbert). *Pargo Colorado.*
Pacific Coast of Mexico, Guaymas to Panama.
Lutjanus colorado Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 338, 351, 355, Mazatlan, Mexico.

1672. Neomænis brachypterus (Cope).
Bahama Islands.
Lutjanus brachypterus Cope, Trans. Amer. Philos. Soc. 1871, 470, New Providence, Bahama Islands.

1673. Neomænis guttatus (Steindachner). *Flamenco.*
Pacific Coast of Mexico, from Guaymas to Panama.
Mesoprion guttatus Steindachner, Ichthyol. Notizen, IX, 18, pl. 8, 1869, Mazatlan, Mexico.

1674. Neomænis synagris (Linnæus). *Lane Snapper; Biajaiba; Red-tail Snapper.*
West Indies; Florida Keys to Colon and Brazil.
Sparus synagris Linnæus, Syst. Nat., ed. x, 280, 1758, Carolina; after Catesby.

1675. Neomænis ambiguus (Poey).
Cuba.
Mesoprion ambiguus Poey, Mem., II, 152, pl. 12, fig. 4, pl. 13, fig. 8, 1860, Cuba.

1676. Neomænis mahogoni (Cuvier & Valenciennes). *Ojanco; Mahogany Snapper.*
West Indies; Havana.
Mesoprion mahogoni Cuvier & Valenciennes, Hist. Nat. Poiss., II, 447, 1828, Martinique.

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Subgenus RAIZERO Jordan & Fesler.
Raizero Jordan & Fesler, Rept. U. S. Fish Com. 1889 (1893), 438 (*aratus*).

1677. Neomænis aratus (Günther). *Pargo de Raizero.*
Pacific Coast of tropical America.
Mesoprion aratus Günther, Proc. Zool. Soc. Lond. 1864, 145, Panama; Chiapas.

Genus 529. RABIRUBIA Jordan & Fesler.
Rabirubia Jordan & Fesler, Rept. U. S. Fish Com. 1889 (1893), 433 (*inermis*).

1678. Rabirubia inermis (Peters).
Pacific Coast of America from Mazatlan to Panama.
Mesoprion inermis Peters, Berliner Monatsber. 1869, 705, Mazatlan, Mexico.

Genus 530. OCYURUS Gill. *Rabirubias.*
Ocyurus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 236 (*chrysurus*).

1679. Ocyurus chrysurus (Bloch). *Yellow-tail; Rabirubia.*
West Indies, southern Florida to Brazil.
Sparus chrysurus Bloch, Ichthyol., pl. 262, 1790, Brazil; after Marcgrave.

Genus 531. RHOMBOPLITES Gill.
Rhomboplites Gill, Proc. Ac. Nat. Sci. Phila. 1862, 237 (*aurorubens*).

1680. Rhomboplites aurorubens (Cuvier & Valenciennes). *Cagon de lo Alto.*
West Indies, north to Charleston, south to Rio Janeiro.
Centropristis aurorubens Cuvier & Valenciennes, Hist. Nat. Poiss., III, 45, 1829. Brazil, Martinique, and San Domingo.

Genus 532. APSILUS Cuvier & Valenciennes. *Arnillos.*
Apsilus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 548, 1830 (*fuscus*, an East Indian species).

Subgenus TROPIDINIUS Gill.
Tropidinius Gill, in Poey, Synopsis, 296, 1868 (*arnillo* = *dentatus*).

1681. Apsilus dentatus Guichenot. *Arnillo.*
West Indies; Havana.
Apsilus dentatus Guichenot, in Ramon de la Sagra, Hist. Cuba: Poiss., 29, pl. 1, fig. 2, 1845, Havana.

Genus 533. APRION Cuvier & Valenciennes. *Vorazes.*
Aprion Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 543, 1830 (*virescens*).

Subgenus PLATYINIUS Gill.
Platyinius Gill, Proc. Ac. Nat. Sci. Phila. 1863, 237 (*vorax*=*macrophthalmus*).

1682. Aprion macrophthalmus (Müller & Troschel). *Voraz.*
West Indies; Havana.
Centropristis macrophthalmus Müller & Troschel, in Schomburgk, Hist. Barbados, 666, 1848, Barbados.

Genus 534. ETELIS Cuvier & Valenciennes.
Etelis Cuvier & Valenciennes, Hist. Nat. Poiss., II, 127, 1828 (*carbunculus*, a Japanese species).

1683. Etelis oculatus (Cuvier & Valenciennes). *Cachucho.*
West Indies to Madeira.
Serranus oculatus Cuvier & Valenciennes, Hist. Nat. Poiss., II, 266, 1828, Martinique.

1684. Etelis aquilonaris (Goode & Bean).
Gulf of Mexico in deep water.
Anthias aquilonaris Goode & Bean, Oceanic Ichthyology, 238, 1896, Gulf of Mexico, at Albatross Station 2402, 28° 36′ N., 85° 33′ 30″ W., in 111 fathoms.

Genus 535. VERILUS Poey.
Verilus Poey, Memorias, II, 125, 1860 (*sordidus*).

1685. Verilus sordidus Poey. *Escolar Chino.*
West Indies.
Verilus sordidus Poey, Memorias, II, 125, pl. 12, fig. 6, 1860, Cuba.

Genus 536. XENOCYS Jordan & Bollman.
Xenocys Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 160 (*jessiæ*).

1686. Xenocys jessiæ Jordan & Bollman.
Galapagos Islands.
Xenocys jessiæ Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 160, Charles Island, Galapagos Archipelago.

Genus 537. XENISTIUS Jordan & Gilbert.
Xenistius Jordan & Gilbert, Synopsis, 920, 1883 (*californiensis*).

1687. Xenistius californiensis (Steindachner).
Pacific Coast of America, from San Diego southward to Guaymas.
Xenichthys californiensis Steindachner, Ichth. Beitr., III, 3, 1875, San Diego.

Genus 538. XENICHTHYS Gill.
Xenichthys Gill, Proc. Ac. Nat. Sci. Phila. 1863, 82 (*xanti*).

1688. Xenichthys agassizii Steindachner.
Galapagos Islands.
Xenichthys agassizii Steindachner, Ichth. Beitr., III, 6, 1875, Galapagos Islands.

1689. Xenichthys xanti Gill.
Pacific Coast of tropical America, from Cape San Lucas to Panama.
Xenichthys xanti Gill, Proc. Ac. Nat. Sci. Phila. 1863, 82, Cape San Lucas.

Genus 539. NEMIPTERUS Swainson.
Nemipterus Swainson, Nat. Hist. Fishes, etc., II, 223, 1839 (*filamentosus*).

1690. Nemipterus macronemus (Günther).
Surinam.
Synagris macronemus Günther, Cat., I, 380, 1859, Surinam; after Cuvier.

Family CLII. HÆMULIDÆ. *The Grunters.*

Genus 540. HÆMULON Cuvier. *Roncos* or *Grunts.*

Hæmulon Cuvier, Règne Animal, ed. 2, vol. 2, 1829 (*elegans*, etc., restricted later to *elegans* = *sciurus*).

1691. Hæmulon sexfasciatum Gill. *Mojarra Almejero.*

Pacific Coast of tropical America, Guaymas to Panama.

Hæmulon sexfasciatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 254, Cape San Lucas.

1692. Hæmulon album Cuvier & Valenciennes. *Margate-fish; Jallao; Margaret Grunt.*

West Indies; Florida Keys to Brazil.

Hæmulon album Cuvier & Valenciennes, Hist. Nat. Poiss., v, 241, 1830, St. Thomas.

1693. Hæmulon macrostoma Günther. *Gray Grunt; Yellow-tail.*

West Indies, north to Florida Keys.

Hæmulon macrostoma Günther, Cat., I, 308, 1859, Jamaica.

1694. Hæmulon bonariense Cuvier & Valenciennes. *Black Grunt; Ronco Prieto.*

West Indies, south to Buenos Ayres.

Hæmulon bonariense Cuvier & Valenciennes, Hist. Nat. Poiss., v, 254, 1830, Buenos Ayres.

1695. Hæmulon parra (Desmarest). *Sailor's Choice; Ronco Blanco; Ronco Prieto; Bastard Margaret.*

West Indies; southern Florida to Brazil; very common at Key West and Havana.

Diabasis parra Desmarest, Prem. Décade Ichth., 30, pl. 2, fig. 2, 1823, Havana.

1696. Hæmulon scudderi Gill. *Mojarra Prieta.*

Pacific Coast of tropical America, Guaymas to Panama.

Hæmulon scudderi Gill, Proc. Ac. Nat. Sci. Phila. 1862, 253, Cape San Lucas.

1697. Hæmulon carbonarium Poey. *Ronco Carbonero; Cæsar Grunt.*

West Indies and the Bermudas, south to Brazil; Havana.

Hæmulon carbonarium Poey, Memorias, II, 176, 1860, Cuba.

1698. Hæmulon steindachneri (Jordan & Gilbert). *Roncador Raiado.*

Both coasts of tropical America; Guaymas to Panama; St. Lucia to Rio Janeiro.

Diabasis steindachneri Jordan & Gilbert, Bull. U. S. Fish Com. 1881 (1882), 322, Panama and Mazatlan.

1699. Hæmulon melanurum (Linnæus). *Jeniguana; Cæsar Grunt.*

West Indies; Havana and southward.

Perca melanura Linnæus, Syst. Nat., ed. x, 292, 1758, and ed. XII, 486, 1766, Bahamas; based on Catesby.

1700. Hæmulon sciurus (Shaw). *Yellow Grunt; Ronco Amarillo; Humpback Grunt; Boar Grunt.*

West Indies; Florida Keys to Brazil.

Sparus sciurus Shaw, General Zoology, IV, pl. 64, 1803, Antilles; based on the description and figure of Bloch.

1701. Hæmulon plumieri (Lacépède). *Common Grunt; Ronco Ronco; Ronco Arará.*

West Indies; abundant from Cape Hatteras to Rio Janeiro.

Labrus plumieri Lacépède, Hist. Nat. Poiss., III, 480, pl. 2, fig. 2, 1802, Martinique; on a copy of a drawing by Plumier, identified with this species by Cuvier.

1702. Hæmulon flavolineatum (Desmarest). *French Grunt; Open-mouthed Grunt; Ronco Condenado.*

West Indies; Florida Keys and Bermudas to Brazil.

Diabasis flavolineatus Desmarest, Prem. Décade Ichth., 35, pl. 2, fig. 1, 1823, Cuba.

Genus 541. BRACHYGENYS Scudder.

Brachygenys Scudder, in Poey, Synopsis, 310, 1868 (*tæniatum*).

1703. Brachygenys chrysargyreus (Günther).

Key West, Havana, and Trinidad.
Hæmulon chrysargyreum Günther, Cat., I, 314, 1859, Trinidad.

Genus 542. BATHYSTOMA Scudder. *Tom-tates.*

Bathystoma Scudder, in Putnam, Bull. Mus. Comp. Zool., I, 12, 1863 (*jeniguano*, etc.; no definition).

1704. Bathystoma rimator (Jordan & Swain). *Tom-tate; Red-mouth Grunt; Cæsar.*

West Indies; Cape Hatteras to Trinidad.
Hæmulon rimator Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 308, Charleston; Key West; Pensacola.

1705. Bathystoma aurolineatum (Cuvier & Valenciennes). *Jeniguano.*

West Indies; Florida Keys to Brazil.
Hæmulon aurolineatum Cuvier & Valenciennes, Hist. Nat. Poiss., V, 237, 1830, Brazil; San Domingo.

1706. Bathystoma striatum (Linnæus). *White Grunt.*

West Indies; Bermudas to Brazil.
Perca striata Linnæus, Syst. Nat., ed. X, 233, 1758, North America.

Genus 543. LYTHRULON Jordan & Swain.

Lythrulon Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 287 (*flaviguttatum*).

1707. Lythrulon flaviguttatum (Gill).

Pacific Coast of tropical America, Guaymas to Panama.
Hæmulon flaviguttatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 254, Cape San Lucas, Lower California.

1708. Lythrulon opalescens Jordan & Starks.

Mazatlan, Mexico.
Lythrulon opalescens Jordan & Starks, in Jordan, Proc. Cal. Ac. Sci. 1895, 459, pl. 40, Mazatlan, Mexico.

Genus 544. ORTHOSTŒCHUS Gill. *Striped Grunts.*

Orthostœchus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 255 (*maculicauda*).

1709. Orthostœchus maculicauda Gill. *Roncador Raiado.*

Pacific Coast of tropical America, Guaymas to Panama.
Orthostœchus maculicauda Gill, Proc. Ac. Nat. Sci. Phila. 1862, 225, Cape San Lucas, Lower California.

Genus 545. ANISOTREMUS Gill.

Anisotremus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 107 (*virginicus*).

Subgenus PARACONODON Bleeker.

Paraconodon Bleeker, Archiv Neerl., XI, 272, 1876 (*pacifici*).

1710. Anisotremus pacifici (Günther).

Pacific Coast of tropical America.
Conodon pacifici Günther, Proc. Zool. Soc. Lond. 1864, 147, Chiapas.

1711. Anisotremus cæsius (Jordan & Gilbert).

Pacific Coast of Mexico; Mazatlan and Acapulco.
Pomadasys cæsius Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 383, Mazatlan.

1712. Anisotremus dovii (Günther).

Pacific Coast of tropical America at Mazatlan and Panama.
Pristipoma dovii Günther, Proc. Zool. Soc. Lond. 1864, 23, Panama.

Subgenus ANISOTREMUS Gill.

1713. Anisotremus surinamensis (Bloch). *Pompon.*

Tropical America, from Cuba to Brazil.
Lutjanus surinamensis Bloch, Ichth., pl. 253, 1791, Surinam.

1714. Anisotremus interruptus (Gill). *Mejarron.*

Pacific Coast, Magdalena Bay to Panama and the Galapagos.

Genytremus interruptus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 256, Cape San Lucas, Lower California.

1715. Anisotremus bicolor (Castelnau). *Maria Prieta.*

Coast of Brazil; perhaps Cuba.

Pristipoma bicolor Castelnau, Anim. Nouv. ou Rares Amér. du Sud, 8, pl. 2, fig. 2, 1850, Bahia, Brazil.

1716. Anisotremus scapularis (Tschudi).

Coast of Peru; said to have been once taken at Mazatlan.

Pristipoma scapulare Tschudi, Fauna Peruana, 12, 1844, Huacho, Peru.

1717. Anisotremus davidsoni (Steindachner). *Sargo Raiado.*

Coast of southern California.

Pristipoma davidsoni Steindachner, Ichth. Beitr., III, 6, 1875, San Diego.

1718. Anisotremus spleniatus (Poey).

Havana.

Pristipoma spleniatum Poey, Memorias, II, 187, 1860, Havana.

1719. Anisotremus tæniatus Gill. *Catalina.*

Pacific Coast of tropical America; Magdalena Bay to Panama.

Anisotremus tæniatus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 107, Panama.

1720. Anisotremus virginicus (Linnæus). *Catalineta; Porkfish.*

West Indies; Florida Keys to Brazil.

Sparus virginicus Linnæus, Syst. Nat., ed. x, 281, 1758, South America.

1721. Anisotremus serrula (Cuvier & Valenciennes). *Tete-de-Roche; Petite Scie.*

Martinique.

Pristipoma serrula Cuv. & Val., Hist. Nat. Poiss., v, 272, 1830, Martinique.

Genus 546. CONODON Cuvier & Valenciennes.

Conodon Cuvier & Valenciennes, Hist. Nat. Poiss., v, 156, 1830 (*antillanus*=*nobilis*).

1722. Conodon nobilis (Linnæus).

West Indies; coast of Texas to Brazil.

Perca nobilis Linnæus, Syst. Nat., ed. x, 191, 1758, North America.

1723. Conodon serrifer Jordan & Gilbert.

Lower California.

Conodon serrifer Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 351. Boca Soledad, Lower California.

Genus 547. BRACHYDEUTERUS Gill. *Burritos.*

Brachydeuterus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 17 (*auritus;* an African species).

1724. Brachydeuterus nitidus (Steindachner).

Pacific Coast of tropical America; Panama, Mazatlan, and the Gulf of California.

Pristipoma nitidum Steindachner, Ichth. Notizen, VIII, 5, 1869, Mazatlan.

1725. Brachydeuterus leuciscus (Günther). *Burrito.*

Pacific Coast of tropical America; not rare at Mazatlan and Panama, south to northern Peru.

Pristopoma leuciscus Günther, Proc. Zool. Soc. Lond. 1864, 147, San Jose de Nicaragua; Chiapas.

1726. Brachydeuterus axillaris (Steindachner).

Pacific Coast of Mexico; Mazatlan and Guaymas.

Pristipoma axillare Steindachner, Ichth. Notizen, VIII, 7, 1869, Mazatlan.

1727. Brachydeuterus corvinæformis (Steindachner).

West Indies to Brazil; Jamaica.

Haemulon corvinæformis Steindachner, Ichth. Notizen, VII, 16, 1868, Santos, Brazil.

Genus 548. POMADASIS Lacépède. *Burros.*
Pomadasis Lacépède, Hist. Nat. Poiss., IV, 516, 1803 (*argenteus*).

Subgenus RHENCUS Jordan & Evermann.
Rhencus Jordan & Evermann, Fishes North and Middle America, 1896 (*panamensis*).

1728. Pomadasis panamensis (Steindachner).
Pacific Coast of tropical America; Panama and Mazatlan.
Pristipoma panamensis Steindachner, Ichth. Beitr., III, 8, 1875, Panama.

Subgenus PRISTIPOMA Cuvier.
Pristipoma Cuvier, Règne Animal, ed. I, 279, 1817 (*hasta*, etc.).

1729. Pomadasis humilis (Kner & Steindachner).
Pacific Coast of Panama; Rio Bayano.
Pristipoma humile Kner & Steindachner, Sitzgb. Akad. Wiss. (Münch.) 1863, 222, Rio Bayano, near Panama.

1730. Pomadasis productus (Poey).
Cuba.
Pristipoma productum Poey, Memorias, II, 186, 1860, Havana.

1731. Pomadasis macracanthus (Günther). *Burro.*
Pacific Coast of tropical America; Panama; Mazatlan; Chiapas, and Punta Arenas.
Pristipoma macracanthum Günther, Proc. Zool. Soc. Lond. 1864. 146, Chiapas.

1732. Pomadasis andrei (Sauvage).
Rio Guayas, Ecuador.
Pristipoma andrei Sauvage, Bull. Sci. Philom. Paris, 7th series, III, 204, 1879, Rio Guayas, Ecuador.

Subgenus RHONCISCUS Jordan & Evermann.
Rhonciscus Jordan & Evermann, Fishes North and Middle America, 1896 (*crocro*).

1733. Pomadasis crocro (Cuvier & Valenciennes).
West Indies; Cuba to Brazil.
Pristipoma crocro Cuv. & Val., Hist. Nat. Poiss., V, 264, 1830, Martinique.

1734. Pomadasis branicki (Steindachner). *Burrito.*
Pacific Coast of tropical America; Mazatlan to Peru.
Pristipoma branicki Steindachner, Denkschr. kaiserl. Akad. Wiss. Wien, XII, 28, 1879, Tumbez, Peru.

1735. Pomadasis ramosus (Poey).
West Indies, south to Brazil.
Pristipoma ramosum Poey, Memorias, II, 186, 1860, Havana.

Genus 549. ORTHOPRISTIS Girard. *Pigfishes.*
Orthopristis Girard, U. S. Mex. Bound. Survey, Zool., 15, 1859 (*duplex*= *chrysopterus*).

1736. Orthopristis forbesi Jordan & Starks.
Albemarle Island, one of the Galapagos Archipelago.
Orthopristis forbesi Jordan & Starks, in Jordan & Evermann, Fishes North and Middle America, 1896, Albemarle Island.

1737. Orthopristis reddingi Jordan & Richardson.
La Paz, Lower California.
Orthopristis reddingi Jordan & Richardson, in Jordan, Proc. Cal. Ac. Sci. 1895, 509, pl. 41, La Paz, Lower California.

1738. Orthopristis chalceus (Günther).
Pacific Coast of tropical America, from Cape San Lucas to the Galapagos.
Pristipoma chalceum Günther, Proc. Zool. Soc. Lond. 1864, 146, Panama.

1739. Orthopristis chrysopterus (Linnæus). *Pigfish; Sailor's Choice; Hogfish.*
South Atlantic and Gulf coasts of the United States.
Perca chrysoptera Linnæus, Syst. Nat., ed. XII, 485, 1766, Charleston, S. C.

1740. Orthopristis poeyi Scudder.
West Indies; Havana.
Orthopristis poeyi Scudder, in Poey, Synopsis, 312, 1868, Havana.

1741. Orthopristis cantharinus (Jenyns).
Galapagos Islands.
Pristipoma cantharinum Jenyns, Voyage Beagle, Fishes, 49, 1842, Galapagos Islands.

Subgenus EVAPRISTIS Jordan & Evermann.
Evapristis Jordan & Evermann, Fishes North and Middle America, 1896 (*lethopristis*).

1742. Orthopristis lethopristis Jordan & Fesler.
Galapagos Archipelago.
Orthopristis lethopristis Jordan & Fesler, Proc. Ac. Nat. Sci. Phila. 1889, 36, Galapagos Islands.

Genus 550. ISACIELLA Jordan & Fesler.
Isaciella Jordan & Fesler, Review of the Sparoid Fishes of America and Europe, 497, 1893 (*brevipinnis*).

1743. Isaciella brevipinnis (Steindachner).
Pacific Coast of Mexico.
Pristipoma brevipinne Steindachner, Ichth. Notizen, VIII, 10, 1869, Mazatlan.

Genus 551. MICROLEPIDOTUS Gill.
Microlepidotus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 256 (*inornatus*).

1744. Microlepidotus inornatus Gill. *Japaton.*
Gulf of California; La Paz and Mazatlan.
Microlepidotus inornatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 256, Cape San Lucas, Lower California.

Genus 552. GENYATREMUS Gill.
Genyatremus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 256 (*cavifrons*).

1745. Genyatremus luteus (Bloch).
Lesser Antilles to Brazil.
Lutianus luteus Bloch, Ichthyologia, pl. 247, 1793, Martinique; on a drawing by Plumier.

Family CLIII. SPARIDÆ. The Porgies.

Genus 553. OTRYNTER Jordan & Evermann. *Deep-water Porgies.*
Otrynter Jordan & Evermann, Fishes N. and M. Amer., 1896 (*caprinus*).

1746. Otrynter caprinus (Bean).
Deep waters off the west coast of Florida.
Stenotomus caprinus Bean, Proc. U. S. Nat. Mus. 1882, 426, Snapper Banks off Pensacola, Florida.

Genus 554. STENOTOMUS Gill.
Stenotomus Gill, Canadian Nat., 1865, 266 (*argyrops*).

1747. Stenotomus chrysops (Linnæus). *Common Scup; Porgy; Scuppaug.*
Atlantic Coast of United States, from Cape Cod to South Carolina.
Sparus chrysops Linnæus, Syst. Nat., ed. XII, 471, 1766, Charleston, South Carolina.

Stenesthes (not Stentorius)

? anyway.

1748. Stenotomus aculeatus (Cuvier & Valenciennes). *Southern Porgy.*
South Atlantic and Gulf coasts of United States, Cape Hatteras to Texas.
Chrysophrys aculeata Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 137, 1830, Charleston, South Carolina.

Genus 555. CALAMUS Swainson.
Calamus Swainson, Nat. Hist. Fishes, etc., II, 222, 1839 (*calamus*).

Subgenus CALAMUS Swainson.

1749. Calamus calamus (Cuvier & Valenciennes). *Saucer-eye Porgy; Pez de Pluma.*
West Indies, north to Florida Keys.
Pagellus calamus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 206, pl. 152, 1830, Martinique; San Domingo.

1750. Calamus proridens Jordan & Gilbert. *Little-head Porgy; Pez de Pluma.*
West Indies, north to the Florida Keys.
Calamus proridens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 150, Key West, Florida.

1751. Calamus pennatula Guichenot.
West Indies.
Calamus pennatula Guichenot, Revision des Pagels, 116, 1850, Martinique.

1752. Calamus bajonado (Bloch & Schneider). *Jolt-head Porgy; Bajonado.*
West Indies, north to Florida Keys.
Sparus bajonado Bloch & Schneider, Syst. Ichth., 284, 1801; after Parra. West Indies.

Subgenus GRAMMATEUS Poey.
Grammateus Poey, Ann. Lyc. Nat. Hist. N. Y. 1872, 182 (*microps*).

1753. Calamus brachysomus (Lockington). *Mojarra Garabata.*
Gulf of California and neighboring waters, locally abundant from Magdalena Bay to Mazatlan.
Sparus brachysomus Lockington, Proc. U. S. Nat. Mus. 1880, 284, Magdalena Bay, Lower California.

1754. Calamus leucosteus Jordan & Gilbert. *White-bone Porgy.*
South Atlantic Coast of United States, known only from the markets of Charleston, South Carolina.
Calamus leucosteus Jordan & Gilbert, in Jordan, Cat. Fishes N. A., 91, 1885, Charleston, South Carolina.

1755. Calamus macrops Poey.
Cuba.
Calamus macrops Poey, Ann. Lyc. Nat. Hist. N. Y. 1872, 181, fig. 3, Havana.

1756. Calamus taurinus (Jenyns).
Galapagos Islands to Peru.
Chrysophrys taurina Jenyns, Zool. Beagle, Fishes, 56, pl. 7, 12, 1842, Galapagos Islands.

1757. Calamus penna (Cuvier & Valenciennes). *Little-mouth Porgy; Sheepshead Porgy.*
Southern Florida to Brazil; known from Charlotte Harbor, Key West, Rio Janeiro, St. Thomas, Havana, Camaru, and Rio Grande do Sul.
Pagellus penna Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 209, 1830, Brazil.

1758. Calamus arctifrons Goode & Bean. *Grass Porgy; Shad Porgy.*
Gulf of Mexico, from Pensacola to Key West.
Calamus arctifrons Goode & Bean, Proc. U. S. Nat. Mus. 1882, 425, Pensacola, Florida.

1759. Calamus medius (Poey).
West Indies; Havana.
Grammateus medius Poey, Ann. Lyc. Nat. Hist. N. Y. 1872, 183, pl. 7, fig. 4, Havana.

Genus 556. PAGRUS Cuvier.

Pagrus Cuvier, Règne Animal, ed. I, 272, 1817 (*argenteus*=*pagrus*).

1760. Pagrus pagrus (Linnæus). *Red Porgy; Besugo; Pargo Colorado.*

Southern Europe and South Atlantic and Gulf coasts of the United States, south to Uruguay.

Sparus pagrus Linnæus, Syst. Nat., ed. x, 279, 1758, southern Europe.

Genus 557. LAGODON Holbrook. *Chopa Spina.*

Lagodon Holbrook, Ichth. South Carolina, 59, 1860 (*rhomboides*).

1761. Lagodon rhomboides (Linnæus). *Pinfish; Bream; Sailor's Choice; Chopa Spina.*

Atlantic and Gulf coasts of United States; Cape Cod to Cuba.

Sparus rhomboides Linnæus, Syst. Nat., ed. XII, 470, 1766, Charleston, S. C.

Genus 558. ARCHOSARGUS Gill. *Sheepsheads.*

Archosargus Gill, Canadian Nat. 1865, 266 (*probatocephalus*).

Subgenus SALEMA Jordan & Evermann.

Salema Jordan & Evermann, Fishes N. and M. Amer., 1896 (*unimaculatus*).

1762. Archosargus unimaculatus (Bloch). *Salema.*

West Indies, north to Key West, south to Rio Janeiro.

Perca unimaculata Bloch, Ichthyologia, pl. 308, 1792, Brazil; on a figure by Prince Maurice.

1763. Archosargus pourtalesii (Steindachner).

Galapagos Islands.

Sargus pourtalesii Steindachner, Fische Afrikas, 39, 1861, Galapagos Islands.

1764. Archosargus tridens (Poey).

Cuba.

Sargus tridens Poey, Enumeratio, 57, 1875, Cuba.

Subgenus ARCHOSARGUS Gill.

1765. Archosargus probatocephalus (Walbaum). *Sheepshead; Sargo Raiado.*

Atlantic and Gulf coasts of the United States; Cape Cod to Florida Keys and Texas.

Sparus probatocephalus Walbaum, Artedi Pisc., 295, 1792, New York; based on Schöpf.

1766. Archosargus aries (Cuvier & Valenciennes).

Honduras to Brazil; Rio Janeiro; Maracaibo; Belize.

Sargus aries Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 58, 1830, Rio Janeiro; Maracaibo.

Genus 559. DIPLODUS Rafinesque.

Diplodus Rafinesque, Indice d'Ittiologia Siciliana, 54, 1810 (*annularis*).

1767. Diplodus holbrookii (Bean).

South Atlantic and Gulf coasts of the United States; Cape Hatteras to Cedar Keys.

Sargus holbrookii Bean, Forest and Stream, June 13, 1878, Charleston, S. C

1768. Diplodus argenteus (Cuvier & Valenciennes). *Sargo.*

West Indies; Florida and the Bermudas, south to Argentina.

Sargus argenteus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 60, 1830, Brazil

1769. Diplodus sargus (Linnæus). *Sargo.*

Coast of southern Europe; Bermudas.

Sparus sargus Linnæus, Syst. Nat., ed. x, 278, 1758, Mediterranean.

Family CLIV. MÆNIDÆ. The Picarels.

Genus 560. SPICARA Rafinesque.

Spicara Rafinesque, Caratteri, etc., 51, 1810 (*flexuosa*=*smaris*).

1770. Spicara martinica (Cuvier & Valenciennes).

West Indies.

Smaris martinicus Cuv. & Val., Hist. Nat. Poiss., VI, 424, 1830, Martinique.

Perca rhomboidalis L. Eds

Genus 561. EMMELICHTHYS Richardson.

Emmelichthys Richardson, Voy. Erebus and Terror, Fishes, 47, 1846 (*nitidus*).

Subgenus INERMIA Poey.

Inermia Poey, Memorias, II, 193, 1860 (*vittata*).

1771. Emmelichthys vittatus (Poey). *Boga.*

Coasts of Cuba.

Inermia vittata Poey, Memorias, II, 193, 1860, Havana.

Family CLV. GERRIDÆ. The Mojarras.

Genus 562. EUCINOSTOMUS Baird & Girard. *Mojarritas.*

Eucinostomus Baird & Girard, Ninth Smithson. Rept., 1855, 20 (*argenteus*).

1772. Eucinostomus dowi (Gill).

Pacific coasts of tropical America; Galapagos Islands; Panama.

Diapterus dowi Gill, Proc. Ac. Nat. Sci. Phila. 1863, 162, Panama.

1773. Eucinostomus pseudogula Poey.

West Indies to Brazil; Bermudas; Cuba; St. Lucia; Bahia.

Eucinostomus pseudogula Poey, Enumeratio, 53, pl. I, 1875, Havana.

1774. Eucinostomus harengulus Goode & Bean.

Atlantic Coast of tropical America; western Florida; Key West; Jamaica; San Domingo; Bahia.

Eucinostomus harengulus Goode & Bean, Proc. U. S. Nat. Mus. 1879, 132, west Florida.

1775. Eucinostomus californiensis (Gill). *Mojarra Cantiléna.*

Pacific Coast of Mexico; Guaymas and Cape San Lucas to Panama.

Diapterus californiensis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 245, Cape San Lucas, Lower California.

1776. Eucinostomus gula (Cuvier & Valenciennes). *Mojarra de Ley; Petite Gueule.*

Atlantic Coast of America from Carolina to Brazil, north to Long Island.

Gerres gula Cuv. & Val., Hist. Nat. Poiss., VI, 464, 1830, Martinique.

Genus 563. ULÆMA Jordan & Evermann.

Ulæma Jordan & Evermann, Proc. Cal. Ac. Sci. 1895, 471 (*lefroyi*).

1777. Ulæma lefroyi (Goode).

West Indies, on sandy shores north to Cedar Keys; Bermudas; Cuba; Key West.

Diapterus lefroyi Goode, Amer. Jour. Sci. Arts 1874, 123, Bermudas.

Genus 564. XYSTÆMA Jordan & Evermann. *Mojarras Blancas.*

Xystæma Jordan & Evermann, Proc. Cal. Ac. Sci. 1895, 471 (*cinereus*).

1778. Xystæma cinereum (Walbaum). *Mojarra de Casta; Mojarra Blanca; Broad Shad.*

Coasts of tropical America; West Indies, north to Florida; Havana; Jamaica; Martinique; Bahamas; Barbados; Florida Keys; Mazatlan; Rio Presidio; Guatemala; Panama; Chiapas.

Mugil cinereus Walbaum, Artedi Piscium, 228, 1792, Bahamas; after Catesby.

Genus 565. GERRES Cuvier. *Mojarras.*

Gerres Cuvier, Règne Animal, ed. 2, II, 104, 1829 (*lineatus*, etc.).

Subgenus MOHARRA Poey.

Moharra Poey, Enumeratio, 50, 1875 (*rhombea*).

1779. Gerres rhombeus Cuvier & Valenciennes.

West Indies and Atlantic coast of tropical America; Jamaica; San Domingo; Martinique; Puerto Cabello; Havana; Aspinwall; Rio Magdalena; Santa Lucia; Bahia.

Gerres rhombeus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 459, 1830, Martinique; San Domingo.

Subgenus DIAPTERUS Ranzani.

Diapterus Ranzani, Nov. Comment. Bonon., v, 1841, 340 (*auratus*).

1780. Gerres aureolus Jordan & Gilbert.

Panama; only original type known.

Gerres aureolus Jordan & Gilbert, Bull. U. S. Fish Com., I, 1881 (1882), 328, Panama.

1781. Gerres peruvianus Cuvier & Valenciennes. *Mojarra de las Aletas Amarillas.*

West coast of tropical America; Mazatlan; Salina Cruz; Chiapas; Panama; Peru.

Gerres peruvianus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 467, 1830, Payta, northern Peru.

1782. Gerres olisthostoma Goode & Bean. *Irish Pompano; Mutton-fish.*

West Indies, north to southern Florida.

Gerres olisthostoma Goode & Bean, Proc. U. S. Nat. Mus. 1882, 423, Indian River, Florida.

Subgenus GERRES Cuvier.

1783. Gerres brevimanus Günther.

Pacific coast of tropical America; only original type known.

Gerres brevimanus Günther, Proc. Zool. Soc. Lond. 1864, 152, Chiapas.

1784. Gerres lineatus (Humboldt). *Mojarra China.*

West coast of Mexico; Acapulco; Mazatlan; San Blas; Chiapas.

Smaris lineatus Humboldt, Observ. Zool., II, 185, pl. 46, 1807–1834, Acapulco.

1785. Gerres brasilianus Cuvier & Valenciennes. *Potao.*

Cuba to Bahia.

Gerres brasilianus Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 458, 1830, Brazil; Porto Rico.

1786. Gerres embryx Jordan & Starks.

Coast of South Carolina.

Gerres embryx Jordan & Starks, in Jordan & Evermann, Fishes North and Middle America, 1896, South Carolina.

1787. Gerres plumieri Cuvier & Valenciennes. *Mojarra.*

Atlantic coast of tropical America and West Indies; Havana; Porto Rico; San Domingo; Jamaica; Pernambuco; Bahia; Aspinwall; Guatemala.

Gerres plumieri Cuvier & Valenciennes, Hist. Nat. Poiss., VI, 452, 1830, Antilles; Porto Rico.

1788. Gerres mexicanus Steindachner.

Rio Teapa, Mexico.

Gerres mexicanus Steindachner, Ueber eine Neue Gerres-Art aus Mexico, Verh. K. K. Geo. Wien., XIII, 383, 1863, Rio Teapa, Mexico.

Family CLVI. KYPHOSIDÆ. The Rudder-Fishes.

Genus 566. **GIRELLA** Gray.

Girella Gray, Illustrations of Indian Zoology, about 1840 (*punctata*).

1789. Girella nigricans (Ayres). *California Bluefish.*

Coast of southern California, from Monterey to Cape San Lucas.

Camarina nigricans Ayres, Proc. Cal. Ac. Sci. 1861, 81, fig. 22, California.

Genus 567. **DOYDIXODON** Valenciennes.

Doydixodon Valenciennes, Voyage de la Vénus, V, 318, 1855 (*freminvillei*).

1790. Doydixodon freminvillei Valenciennes.

Galapagos Islands and coast of Peru.

Doydixodon freminvillei Valenciennes, Voyage Vénus, 323, pl. 5, 1855, Galapagos Islands.

Genus 568. HERMOSILLA Jenkins & Evermann.

Hermosilla Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 144 (*azurea*).

1791. Hermosilla azurea Jenkins & Evermann.

Gulf of California.

Hermosilla azurea Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 144, Guaymas, Mexico.

Genus 569. KYPHOSUS Lacépède.

Kyphosus Lacépède, Hist. Nat. Poiss., III, 114, 1802 (*bigibbus* = *fuscus*).

1792. Kyphosus analogus (Gill). *Salema.*

Pacific Coast of tropical America, Gulf of California to Panama.

Pimelepterus analogus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 245, Cape San Lucas.

1793. Kyphosus incisor (Cuvier & Valenciennes). *Chopa Amarilla.*

Cuba. & Brazil.

Pimelepterus incisor Cuv. & Val., Hist. Nat. Poiss., VII, 266, 1831, Brazil.

1794. Kyphosus elegans (Peters). *Chopa.*

Pacific Coast of tropical America, from Guaymas to Mazatlan.

Pimelepterus elegans Peters, Berlin. Monatsb., 707, 1869, Mazatlan, Mexico.

1795. Kyphosus sectatrix (Linnæus). *Rudder-fish; Bermuda Chub; Chopa Blanca.*

West Indies, ranging from Cape Cod to Brazil, crossing the ocean to the Canary Islands; accidental in the Mediterranean; one taken at Palermo.

Perca sectatrix Linnæus, Syst. Nat., ed. XII, 486, 1766, "America."

1796. Kyphosus lutescens (Jordan & Gilbert). = elegans var.

Revillagigedo Archipelago.

Pimelepterus lutescens Jordan & Gilbert, Proc. U. S. N. M. 1881, 229, Braithwaite Bay, Socorro Island. (Pale yellow) (Pale steel blue

Genus 570. SECTATOR Jordan & Fesler.

Sectator Jordan & Fesler, Review Sparoid Fishes, 534, 1893 (*ocyurus*).

1797. Sectator ocyurus (Jordan & Gilbert).

Panama.

Pimelepterus ocyurus Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 327, 328, Bay of Panama.

Genus 571. MEDIALUNA Jordan & Fesler. *Medialunas.*

Medialuna Jordan & Fesler, Review Sparoid Fishes, 536, 1893 (*californiensis*).

1798. Medialuna californiensis (Steindachner). *Medialuna; Half-moon.*

Coast of southern California, from Point Conception southward to Cerros Island.

Scorpis californiensis Steindachner, Ichth. Beitr., III, 19, 1875, San Diego.

Family CLVII. SCIÆNIDÆ. The Croakers.

Subfamily OTOLITHINÆ.

Genus 572. SERIPHUS Ayres.

Seriphus Ayres, Proc. Cal. Ac. Sci., II, 1861, 80 (*politus*).

1799. Seriphus politus Ayres. *Queenfish; White Croaker.*

Coast of southern California, from Point Conception to Cerros Island; common on sandy shores.

Seriphus politus Ayres, Proc. Cal. Ac. Sci., II, 1861, 80, no locality given.

Genus 573. ISOPISTHUS Gill.

Isopisthus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 18 (*parvipinnis*).

1800. Isopisthus remifer Jordan & Gilbert.

Panama, on sandy shores, rather common.

Isopisthus remifer Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 320, Panama.

1801. Isopisthus parvipinnis (Cuvier & Valenciennes).
Coast of Brazil, north to Cayenne.
Anoylodon parvipinnis Cuv. & Val., Hist. Nat. Poiss., v, 84, 1830, Cayenne.

Genus 574. CYNOSCION Gill. *Weakfishes.*
Cynoscion Gill, Proc. Ac. Nat. Sci. Phila. 1862, 18 (*regalis*).

Subgenus BUCCONE Jordan & Evermann.
Buccone Jordan & Evermann, new subgenus (*prædatorius*).

1802. Cynoscion prædatorius (Jordan & Gilbert). *Becone.*
Coast of Panama; scarce.
Cestreus prædatorius Jordan & Gilbert, in Jordan & Eigenmann, Review of the Sciænidæ, 363, 1889, Panama.

Subgenus CYNOSCION Gill.

1803. Cynoscion acoupa (Lacépède). *Acoupa; Toeroe.*
Atlantic Coast of South America, Brazil north to Venezuela; generally common.
Cheilodipterus acoupa Lacépède, Hist. Nat. Poiss., III, 546, 1802, Cayenne.

1804. Cynoscion squamipinnis (Günther).
Pacific Coast of tropical America; known from a few specimens taken at La Union and Panama.
Otolithus squamipinnis Günther, Fishes Cent. Am., 387 and 429, 1869, Panama.

1805. Cynoscion othonopterus Jordan & Gilbert.
Gulf of California.
Cynoscion othonopterum Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 274, Punta San Felipe, Mexico.

1806. Cynoscion obliquatus (Valenciennes).
Martinique.
Otolithus obliquatus Valenciennes, in Sauvage, Bull. Soc. Philom. Paris, III, 209, 1879, Martinique.

1807. Cynoscion jamaicensis (Vaillant & Bocourt).
Jamaica.
Otolithus jamaicensis Vaillant & Bocourt, Miss. Sci. au Mexique, Poissons, 156, 1874, Jamaica.

1808. Cynoscion nothus (Holbrook). *Bastard Weakfish.*
South Atlantic and Gulf coasts of United States; rather rare at Charleston.
Otolithus nothus Holbrook, Ichth. S. C., 134, pl. 19, fig. 1, 1860, South Carolina.

1809. Cynoscion regalis (Bloch & Schneider). *Common Weakfish; Squeteague; "Sea Trout."*
Atlantic and Gulf coasts of United States, Cape Cod southward to Mobile.
Johnius regalis Bloch & Schneider, Syst. Ichth., 75, 1801, New York.

1810 Cynoscion thalassinus (Holbrook).
Pensacola; Pass Christian, Mississippi; Hampton Roads, Virginia.
Otolithus thalassinus Holbrook, Ichth. South Carolina, 132, pl. 18, fig. 2, 1859, Charleston, South Carolina.

1811. Cynoscion reticulatus (Günther). *Corrina.*
Pacific Coast of tropical America, Mazatlan to Panama.
Otolithus reticulatus Günther, Proc. Zool. Soc. Lond. 1864, 149, San Jose de Guatemala; Chiapam.

1812. Cynoscion nebulosus (Cuvier & Valenciennes). *Spotted Weakfish; Spotted Squeteague; Spotted Sea Trout.*
South Atlantic and Gulf Coast of the United States; New York to Texas; everywhere common on our southern coast; rare north of Virginia.
Otolithus nebulosus Cuvier & Valenciennes, Hist. Nat. Poiss., v, 79, 1830, locality unknown.

1813. Cynoscion parvipinnis Ayres. *California "Bluefish."*
Coasts of Lower California; Santa Barbara Islands to Guaymas; common along the coasts of southern California, as far north as San Pedro.
Cynoscion parvipinnis Ayres, Proc. Cal. Ac. Sci. 1861, 156, coast of Lower California.

1814. Cynoscion xanthulus Jordan & Gilbert. *Corrina de las Aletas; Amarillas.*
Pacific Coast of Mexico; not rare about Mazatlan.
Cynoscion xanthulum Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 460, Mazatlan.

1815. Cynoscion albus (Günther).
Pacific Coast of tropical America; not rare at Panama.
Otolithus albus Günther, Proc. Zool. Soc. Lond. 1864, 149, Chiapam; Panama.

1816. Cynoscion macdonaldi Gilbert. *Totuava.*
Gulf of California.
Cynoscion macdonaldi Gilbert, Proc. U. S. Nat. Mus. 1890, 64, head of Gulf of California.

1817. Cynoscion stolzmanni (Steindachner).
Pacific Coast of tropical America from Panama to Peru.
Otolithus stolzmanni Steindachner, Neue u. Seltene Fische k. k. Zool. Mus. Wien, 35, 1879, pl. 2, fig. 1, Tumbez, Peru.

Subgenus ATRACTOSCION Gill.
Atractoscion Gill, Proc. Ac. Nat. Sci. Phila. 1862, 18 (*æquidens*).

1818. Cynoscion nobilis (Ayres). *"White Sea-bass" of California.*
Coast of California, north to San Francisco, occasionally straying farther.
Johnius nobilis Ayres, Proc. Cal. Ac. Sci. 1860, 78, San Francisco.

1819. Cynoscion phoxocephalus Jordan & Gilbert.
Pacific Coast of tropical America; Panama.
Cynoscion phoxocephalum Jordan & Gilbert, Bull. U. S. Fish. Com. 1881, 318, Panama.

1820. Cynoscion leiarchus (Cuvier & Valenciennes).
Coasts of Brazil and Guiana.
Otolithus leiarchus Cuvier & Valenciennes, Hist. Nat. Poiss., v, 78, 1830, Brazil; Cayenne.

1821. Cynoscion virescens (Cuvier & Valenciennes).
Coasts of Guiana and Brazil.
Otolithus virescens Cuvier & Valenciennes, Hist. Nat. Poiss., v, 72, 1830, Surinam.

1822. Cynoscion microlepidotus (Cuvier & Valenciennes).
Coast of Brazil and Guiana.
Otolithus microlepidotus Cuvier & Valenciennes, Hist. Nat. Poiss., v, 79, 1830, Surinam.

Genus 575. SAGENICHTHYS Berg.
Sagenichthys Berg, Ann. Mus. Nac. Buenos Aires, 52, 1895 (*ancylodon*).

1823. Sagenichthys ancylodon (Bloch & Schneider). *Pescadillo del Rey.*
Tropical America, on both coasts; Panama; Guiana; Brazil; Uruguay; rather scarce.
Lonchurus ancylodon Bloch & Schneider, Syst. Ich., 102, pl. 25, 1801, Surinam.

Genus 576. NEBRIS Cuvier & Valenciennes.
Nebris Cuvier & Valenciennes, Hist. Nat. Poiss., v, 149, 1830 (*microps*).

1824. Nebris microps Cuvier & Valenciennes.
Atlantic Coast of northern South America; sandy shores.
Nebris microps Cuvier & Valenciennes, Hist. Nat. Poiss., v, 149, pl. 112, 1830, Surinam.

1825. Nebris zestus Jordan & Starks.
Panama.
Nebris zestus Jordan & Starks, in Jordan & Evermann, Fishes North and Middle America, 1896, Panama.

Genus 577. PLAGIOSCION Gill.

Plagioscion Gill, Proc. Ac. Nat. Sci. Phila. 1861, 82 (a generic description only, no species or type being indicated).

1826. Plagioscion squamosissimus (Heckel).

Rivers of Guiana and Brazil; generally common southward.
Sciæna squamosissima Heckel, Annalen des Wiener Museum, II, 438, 1840, Amazon River.

1827. Plagioscion surinamensis (Bleeker).

Rivers of Guiana, Venezuela, and Colombia.
Pseudosciæna surinamensis Bleeker, Arch. Néerl. Sci. Exact. et Nat., VIII, 1873, 458, 18, Surinam.

1828. Plagioscion heterolepis (Bleeker).

Surinam.
Johnius heterolepis Bleeker, Arch. Neerl., VIII, 1873, with plate, Surinam.

Genus 578. LARIMUS Cuvier & Valenciennes.

Larimus Cuvier & Valenciennes, Hist. Nat. Poiss., V, 145, 1830 (*breviceps*).

1829. Larimus argenteus (Gill).

Panama, locally common.
Amblyscion argenteus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 165, west coast Central America.

1830. Larimus effulgens Gilbert.

Pacific Coast of Mexico, Sonora to Panama.
Larimus effulgens Gilbert MS., 1896, San Juan Lagoon, Sonora.

1831. Larimus acclivis Jordan & Bristol.

West coast of Mexico and Central America, from Sonora to Panama.
Larimus acclivis Jordan & Bristol, Proc. U. S. Nat. Mus. 1896, San Juan Lagoon, Sonora.

1832. Larimus breviceps Cuvier & Valenciennes.

West Indies, south to Brazil.
Larimus breviceps Cuvier & Valenciennes, Hist. Nat. Poiss., V, 146, pl. 140, 1830, Brazil; San Domingo.

1833. Larimus pacificus Jordan & Bollman.

Pacific Ocean, off coast of Colombia.
Larimus pacificus Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 161, Albatross Station 2802, 8° 38′ N., 79° 31′ 30″ W., between Galapagos Islands and Panama.

1834. Larimus fasciatus Holbrook.

South Atlantic Coast of the United States, from Chesapeake Bay to Galveston, Texas; not common.
Larimus fasciatus Holbrook, Ichth. South Carolina, 153, pl. 22, fig. 1, 1860, Charleston, S. C.

Genus 579. ODONTOSCION Gill.

Odontoscion Gill, Proc. Ac. Nat. Sci. Phila. 1862, 18 (*dentex*).

1835. Odontoscion dentex (Cuvier & Valenciennes). *Corvina.*

West Indies.
Corvina dentex Cuvier & Valenciennes, Hist. Nat. Poiss., V, 139, pl. 109, 1830, San Domingo.

1836. Odontoscion xanthops Gilbert.

Panama.
Odontoscion xanthops Gilbert MS., 1896, Panama.

Genus 580. CORVULA Jordan & Eigenmann.

Corvula Jordan & Eigenmann, Review of Sciænidæ Europe and America, in Report U. S. Fish Com. 1886 (1889), 377 (*batabana*).

ula macrops (Steindachner). *Vacuocua.*

ific Coast of tropical America, Mazatlan to Panama.
ina macrops Steindachner, Ichth. Beitr., III, 24, fig. 2, 1875, Panama.

1838. Corvula sialis Jordan & Eigenmann.
Florida Keys.
Corvula sialis Jordan & Eigenmann, Report U. S. Fish Com. 1886 (1889), 379, Key West.

1839. Corvula subæqualis (Poey).
West Indies.
Corvina subæqualis Poey, Ann. Lyc. Nat. Hist. New York 1875, 58, Cuba.

1840. Corvula sanctæ-luciæ Jordan.
West Indies.
Corvula sanctæ-luciæ Jordan, Proc. U. S. Nat. Mus. 1889, 649, Port Castries, St. Lucia.

1841. Corvula batabana (Poey).
Cuba and Puerto Rico.
Johnius batabanus Poey, Memorias, II, 184, 1860, Batabano, south coast of Cuba.

Genus 581. ELATTARCHUS Jordan & Evermann.
Elattarchus Jordan & Evermann, Fishes N. and M. Am., 1896 (*archidium*).

1842. Elattarchus archidium (Jordan & Gilbert).
Panama.
Odontoscion archidium Jordan & Gilbert, Bull. U. S. F. C. 1881, 317, Panama.

Genus 582. BAIRDIELLA Gill. *Mademoiselles.*
Bairdiella Gill, Cat. Fish. East Coast N. A., 33, 1861 (*argyroleuca* = *chrysura*).

1843. Bairdiella chrysura (Lacépède). *Mademoiselle; Yellow-tail.*
South Atlantic and Gulf coasts of United States, north to New York; very abundant on our sandy shores from Long Island to Texas.
Dipterodon chrysurus Lacépède, Hist. Nat. Poiss., III, 64, 1802, South Carolina; after Linnæus.

1844. Bairdiella ensifera (Jordan & Gilbert).
Panama.
Sciæna ensifera Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 313, Bay of Panama; Punta Arenas.

1845. Bairdiella icistia (Jordan & Gilbert). *Corbineta.*
Pacific Coast of Mexico, rather common about Mazatlan.
Sciæna icistia Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 356, Mazatlan.

1846. Bairdiella ronchus (Cuvier & Valenciennes). *Roncoo; Corvina.*
Atlantic coasts of tropical America, generally common in the West Indies and along the coast of Brazil.
Corvina ronchus Cuvier & Valenciennes, Hist. Nat. Poiss., V, 107, 1830, Maracaibo; Surinam.

1847. Bairdiella armata Gill.
Both coasts of tropical America; not uncommon on the Pacific Coast about Panama, and equally abundant on the Atlantic Coast.
Bairdiella armata Gill, Proc. Ac. Nat. Sci. Phila. 1863, 164, west coast of Central America.

1848. Bairdiella aluta (Jordan & Gilbert).
Pacific Coast of Central America.
Sciæna aluta Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 232, La Union, San Salvador.

1849. Bairdiella chrysoleuca (Günther).
Panama.
Corvina chrysoleuca Günther, Fish. Central America, 387 and 427, plate 67, fig. 1, 1869, Panama.

STELLIFER (Cuv.) Oken.

Genus 583. STELLIFERUS Stark.

Stelliferus Stark, Elements Nat. Hist., I, 459, 1828 (*stellifer*); *fide* Gill.

1850. Stelliferus oscitans (Jordan & Gilbert).

Panama.

Sciæna oscitans Jordan & Gilbert, Bull. U. S. F. C. 1881, 312, Bay of Panama.

1851. Stelliferus furthi (Steindachner).

Panama.

Corvina (*Homoprion*) *furthi* Steindachner, Ichth. Beitr., III, 26, fig. 3, 1875, Panama.

1852. Stelliferus illecebrosus Gilbert.

Panama.

Stelliferus illecebrosus Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

1853. Stelliferus stellifer (Bloch).

Coasts of Guiana and Brazil.

Bodianus stellifer Bloch, Ichthyologia, pl. 231, 1790, "Cape of Good Hope."

1854. Stelliferus lanceolatus (Holbrook).

South Atlantic and Gulf coasts of United States, Charleston to Texas.

Homoprion lanceolatus Holbrook, Ichth. South Carolina, ed. I, 168, pl. 23, 1856, Port Royal Sound, South Carolina.

1855. Stelliferus ericymba (Jordan & Gilbert).

Panama.

Sciæna ericymba Jordan & Gilbert, Bull. U. S. F. C. 1881, 311, Bay of Panama.

1856. Stelliferus microps (Steindachner).

Coast of Brazil and Guiana.

Corvina microps Steindachner, Ichth. Notizen, I, 6, pl. 2, fig. 1, 1864, Guiana.

1857. Stelliferus sestocarus Gilbert.

Panama.

Stelliferus sestocarus Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

Genus 584. OPHIOSCION Gill.

Ophioscion Gill, Proc. Ac. Nat. Sci. Phila. 1863, 164 (*typicus*).

1858. Ophioscion adustus Jordan & Evermann.

West Indies to coast of Brazil.

Ophioscion adustus Jordan & Evermann, Fishes North and Middle America, 1896, Pernambuco; Jérémie; Hayti; Brazil.

1859. Ophioscion typicus Gill.

Panama.

Ophioscion typicus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 165, west coast Central America.

1860. Ophioscion strabo Gilbert.

Panama.

Ophioscion strabo Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

1861. Ophioscion simulus Gilbert.

Panama.

Ophioscion similus Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

1862. Ophioscion imiceps (Jordan & Gilbert).

Panama.

Sciæna imiceps Jordan & Gilbert, Bull. U. S. F. C. 1881, 309, Bay of Panama.

1863. Ophioscion scierus (Jordan & Gilbert).

Pacific Coast of tropical America, from Mazatlan to Panama.

Sciæna sciera Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 480, Panama

1864. Ophioscion vermicularis (Günther).

Panama.

Corvina vermicularis Günther, Fish. Central America, 387 and 427, pl. 67, fig 2, 1869, Panama.

Stellifer Oken. Isis 1817. 1182. (Les Stellifères

Genus 585. SCIÆNOPS Gill. *Red Drums.*
Sciænops Gill, Proc. Ac. Nat. Sci. Phila. 1863, 30 (*ocellatus*).

1865. Sciænops ocellatus (Linnæus). *Red Drum; Channel Bass; "Redfish"; Pescado Colorado; Bull Redfish.*
South Atlantic and Gulf coasts of the United States, New York to Texas.
Perca ocellata Linnæus, Syst. Nat., ed. XII, 483, 1766, South Carolina.

Genus 586. SCIÆNA (Artedi) Linnæus. *Black Drums.*
Sciæna, part, Artedi, Genera Piscium, 1738.

Subgenus CALLAUS Jordan.
Callaus Jordan, Review of Sciænidæ, 401, 1889 (*deliciosa*).

1866. Sciæna deliciosa (Tschudi).
Pacific Coast of South America, from Panama to Peru.
Corvina deliciosa Tschudi, Fauna Peruana Ichthyol., 8, 1845, Peru.

Subgenus CHEILOTREMA Tschudi.
Cheilotrema Tschudi, Fauna Peruana, Fische, 13, 1845 (*fasciatum*).

1867. Sciæna saturna (Girard). *Red Roncador; Black Croaker.*
Coast of southern California, from Santa Barbara to Cerros Island.
Amblodon saturnus Girard, U. S. Pac. R. R. Survey, 98, 1858, San Diego, Cal.

Genus 587. RONCADOR Jordan & Gilbert.
Roncador Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 28 (*stearnsi*).

1868. Roncador stearnsi (Steindachner). *Roncador.*
Coast of southern California, north to Santa Barbara.
Corvina stearnsi Steindachner, Ichth. Beitr., III, 22, 1875, San Diego.

Genus 588. LEIOSTOMUS Lacépède. *Goodies.*
Leiostomus Lacépède, Hist. Nat. Poiss., IV, 439, 1802 (*xanthurus*).

1869. Leiostomus xanthurus Lacépède. *Spot; Goody; Post-croaker; Oldwife; Lafayette.*
South Atlantic and Gulf coasts of United States; Cape Cod to Texas; once doubtfully recorded from Martinique.
Leiostomus xanthurus Lacépède, Hist. Nat. Poiss., IV, 439, pl. 10, fig. 1, 1802, Carolina.

Genus 589. PACHYPOPS Gill.
Pachypops Gill, Proc. Ac. Nat. Sci. Phila. 1861, 87 (*trifilis*).

1870. Pachypops furcræus (Lacépède).
Rivers and estuaries of Guiana.
Perca furcræa Lacépède, Hist. Nat. Poiss., IV, 398, 424, 1802, Surinam.

Genus 590. GENYONEMUS Gill.
Genyonemus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 87 (*lineatus*).

1871. Genyonemus lineatus (Ayres). *Little Roncador; Kingfish; Croaker.*
Coast of southern California, San Francisco to Cerros Island.
Leiostomus lineatus Ayres, Proc. Cal. Ac. Sci. 1855, 25, San Francisco.

Genus 591. MICROPOGON Cuvier & Valenciennes. *Croakers.*
Micropogon Cuvier & Valenciennes, Hist. Nat. Poiss., V, 213, 1830 (*lineatus*=*undulatus*).

1872. Micropogon undulatus (Linnæus). *Croaker; Roncadina; Corrina.*
South Atlantic and Gulf coasts of United States; Cape Cod to Texas.
Perca undulata Linnæus, Syst. Nat., ed. XII, 483, 1766, South Carolina.

1873. Micropogon furnieri (Desmarest). *Verrugato.*
West Indies and coasts of South America.
Umbrina furnieri Desmarest, Première Décade Ichthyol., 22, pl. 2, fig. 3, 1882, Havana.

1874. Micropogon megalops Gilbert.

Gulf of California.

Micropogon megalops Gilbert, Proc. U. S. Nat. Mus. 1890, 64, Gulf of California, in 14 fathoms, at Albatross Station 3021.

1875. Micropogon ectenes Jordan & Gilbert. *Verrugate.*

Pacific Coast of Mexico; Mazatlan.

Micropogon ectenes Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 355, Mazatlan.

1876. Micropogon altipinnis Günther.

Panama.

Micropogon altipinnis Günther, Proc. Zool. Soc. Lond. 1864, 149, San Jose: Panama; Chiapam.

Genus 592. UMBRINA Cuvier.

Umbrina Cuvier, Règne Animal, ed. I, II, 297, 1817 (*cirrosa*; *Sciæna* L. being restricted to *Sciæna umbra*, a Linnæan, and to *Sciæna aquila*, a non-Linnæan species).

1877. Umbrina broussonnetii Cuvier & Valenciennes.

West Indies; Florida to Brazil.

Umbrina broussonnetii Cuv. & Val., Hist. Nat. Poiss., V, 187, 1830, Jamaica.

1878. Umbrina coroides Cuvier & Valenciennes.

Coast of Brazil.

Umbrina coroides Cuvier & Valenciennes, Hist. Nat. Poiss, V, 187, 1830, Brazil.

1879. Umbrina roncador Jordan & Gilbert. *Yellow-finned Roncador; Yellow-tail Croaker.*

Coast of southern California, from Point Conception to Guaymas.

Umbrina roncador Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 277, Pequena Bay, west coast Lower California.

1880. Umbrina xanti Gill.

Pacific Coast of tropical America, Cape San Lucas to Panama.

Umbrina xanti Gill, Proc. Ac. Nat. Sci. Phila. 1862, 256, Cape San Lucas.

1881. Umbrina sinaloæ Scofield.

Pacific Coast of Mexico; Mazatlan.

Umbrina sinaloæ Scofield, Proc. Cal. Ac. Sci. 1896, Mazatlan.

1882. Umbrina galapagorum Steindachner.

Galapagos Archipelago.

Umbrina galapagorum Steindachner, Ichth. Beitr., VII, 20, 1878, James Island, Galapagos.

1883. Umbrina dorsalis Gill.

Pacific Coast of Mexico.

Umbrina dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 257, Cape San Lucas.

Genus 593. MENTICIRRHUS Gill. *Kingfishes.*

Menticirrhus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 86 (*alburnus*).

1884. Menticirrhus simus Jordan & Eigenmann.

Pacific Coast of tropical America; Mazatlan to Panama.

Menticirrhus simus Jordan & Eigenmann, Review Sciænidæ, 427, 1889, Mazatlan and Panama.

1885. Menticirrhus nasus (Günther).

Panama.

Umbrina nasus Günther, Fishes Central America, 387 and 426, 1869, Panama.

1886. Menticirrhus panamensis (Steindachner).

Pacific Coast of tropical America; Mazatlan to Panama.

Umbrina panamensis Steindachner, Ichth. Beitr., IV, 9, 1875, Panama.

1887. Menticirrhus martinicensis (Cuvier & Valenciennes).

West Indies to Patagonia.

Umbrina martinicensis Cuvier & Valenciennes, Hist. Nat. Poiss., V, 186, 1830, Martinique.

1888. Menticirrhus americanus (Linnæus). *Carolina Whiting; Sand Whiting.*
South Atlantic and Gulf coasts of United States; Chesapeake Bay to Texas.
Cyprinus americanus Linnæus, Syst. Nat., ed. x, 321, 1758, Carolina; based on *Whiting* of Catesby; (not *Cyprinus americanus* of 12th edition of Systema Naturæ, which is a cyprinoid, *Abramis bosci* C. & V.).

1889. Menticirrhus saxatilis (Bloch & Schneider). *Kingfish; Sea Mink; Northern Whiting.*
Atlantic and Gulf coasts of the United States; Cape Ann to Key West and Pensacola; most common northward.
Johnius saxatilis Bloch & Schneider, Syst. Ichth., 75, 1801, New York.

1890. Menticirrhus undulatus (Girard). *California Whiting; Sand Sucker.*
Southern California, north to Santa Barbara.
Umbrina undulata Girard, Proc. Ac. Nat. Sci. Phila. 1854, 148, San Diego, Cal.

Subgenus UMBRULA Jordan & Eigenmann.
Umbrula Jordan & Eigenmann, Review Sciænidæ, 424, 1889 (*littoralis*).

1891. Menticirrhus elongatus (Günther). *Verrugato.*
Pacific Coast of tropical America; Mazatlan to Panama.
Umbrina elongata Günther, Proc. Zool. Soc. Lond. 1864, 148, Chiapas.

1892. Menticirrhus littoralis (Holbrook). *Surf Whiting; Silver Whiting.*
South Atlantic and Gulf coasts of United States; North Carolina to Texas.
Umbrina littoralis Holbrook, Ichth. South Carolina, ed. I, 142, pl. 20, fig. 1, 1856, South Carolina.

Genus 594. PARALONCHURUS Bocourt.
Paralonchurus Bocourt, Nouv. Arch. Mus., IV, 21, 1869 (*petersi*).

Subgenus POLYCLEMUS Berg. *Corvalos.*
Polyclemus Berg, Ann. Mus. Nac. Buenos Aires, 1895, 54 (*dumerili*).

1893. Paralonchurus dumerili (Bocourt).
Panama.
Polycirrhus dumerili Bocourt, Nouv. Arch. Mus. d'Hist. Natur., IV, 22, 1868, La Union.

Subgenus ZONOSCION Jordan & Evermann.
Zonoscion Jordan & Evermann, new subgenus (*rathbuni*).

1894. Paralonchurus rathbuni (Jordan & Bollman).
Panama.
Polycirrhus rathbuni Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 162, Panama.

Subgenus ZACLEMUS Gilbert.
Zaclemus Gilbert, Proc. Cal. Ac. Sci. 1896 (*goodei*).

1895. Paralonchurus goodei Gilbert.
Panama.
Paralonchurus goodei Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

Subgenus PARALONCHURUS Bocourt.

1896. Paralonchurus petersi Bocourt.
Coast of Central America, rare at Panama.
Paralonchurus petersi Bocourt, Nouv. Archives du Muséum, IV, 1869, 22, La Union, San Salvador.

Genus 595. LONCHIURUS Bloch.
Lonchiurus Bloch, Ichthyologiæ, pl. 360, 1793 (*barbatus* = *lanceolatus*).

1897. Lonchiurus lanceolatus (Bloch).
West Indies to Guiana.
Perca lanceolata Bloch, Nov. Act. Sc. Copenh., III, 383, 1788, India.

Genus 596. POGONIAS Lacépède. *Sea Drums.*

Pogonias Lacépède, Hist. Nat. Poiss., III, 138, 1802 (*fasciatus* = *cromis*).

1898. Pogonias cromis (Linnæus). *Drum.*

Atlantic coasts of America; Long Island to mouth of Rio Grande.

Labrus cromis Linnæus, Syst. Nat., ed. XII, 479, 1766, Carolina.

1899. Pogonias courbina (Lacépède).

Guiana to Uruguay, rather common in Brazil.

Pogonathus courbina Lacépède, Hist. Nat. Poiss., V, 121, 1803, Rio de la Plata.

Genus 597. APLODINOTUS Rafinesque. *River Drums.*

Aplodinotus Rafinesque, Jour. de Phys. 1819, 418 (*grunniens*).

1900. Aplodinotus grunniens Rafinesque. *Fresh-water Drum; Gaspergou; Lake Sheepshead; Thunder-pumper; Croaker; Bubbler; White Perch.*

Great Lakes to Texas; abundant in all lakes and large streams west of the Alleghanies and east of the Great Plains.

Aplodinotus grunniens Rafinesque, Jour. de Phys. 1819, 88, Ohio River.

Genus 598. EQUES Bloch. *Ribbon-fishes.*

Eques Bloch, Syst. Ichthyologiæ, 1793 (*americanus* = *lanceolatus*).

Subgenus PAREQUES Gill.

Pareques Gill, in Goode, Bull. U. S. Nat. Mus., V, 50, 1875 (*acuminatus*).

1901. Eques viola Gilbert.

Panama.

Eques viola Gilbert, Proc. Cal. Ac. Sci. 1896, Panama.

1902. Eques acuminatus (Bloch & Schneider).

West Indies; South Carolina to Brazil.

Grammistes acuminatus Bloch & Schneider, Syst. Ichth., 184, 1801, no locality; after Seba.

1902a. Eques acuminatus umbrosus Jordan & Eigenmann.

Southeast coast of the United States, Charleston to Pensacola.

Eques acuminatus umbrosus Jordan & Eigenmann, Review Sciænidæ, 440, 1889, Charleston and Pensacola.

1903. Eques punctatus Bloch & Schneider. ***Serrana; Hispana.***

West Indies.

Eques punctatus Bloch & Schneider, Syst. Ichth., 106, 1801, Cuba; based on Parra, 2, pl. 2, fig. 2.

1904. Eques pulcher Steindachner.

Barbados.

Eques pulcher Steindachner, Ichth. Notizen, VI, 43, 1867, Barbados.

1905. Eques lanceolatus (Linnæus). ***Ribbon-fish; Guapena; Serrana.***

West Indies, ranging northward to Pensacola.

Chætodon lanceolatus Linnæus, Syst. Naturæ, ed. X, 277, 1758, "Caraibes Islands"; based on Edwards, pl. 210.

Group CIRRHITOIDEI. The Cirrhitoid Fishes.

Family CLVIII. CIRRHITIDÆ. The Cirrhitoids.

Genus 599. CIRRHITES Lacépède.

Cirrhites Lacépède, Hist. Nat. Poiss., V, 3, 1803 (*maculatus*).

1906. Cirrhites rivulatus Valenciennes.

Cape San Lucas to the Galapagos Islands.

Cirrhites rivulatus Valenciennes, Voyage Vénus, Poiss., 309, pl. 3, fig. 1, 1855, Galapagos Islands.

1907. Cirrhites betaurus Gill.

Cape San Lucas and Mazatlan.

Cirrhites betaurus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 259, Cape San Lucas.

Suborder HOLCONOTI.

Family CLIX. EMBIOTOCIDÆ. The Surf-Fishes.

Genus 600. HYSTEROCARPUS Gibbons.

Hysterocarpus Gibbons, Daily Placer Times and Transcript, May 18, 1854, and in Proc. Ac. Nat. Sci. Phila., 1854, 124 (*traski*).

1908. Hysterocarpus traski Gibbons.

Rivers of central California, chiefly in the Sacramento Valley from Lake County to Santa Clara County.

Hysterocarpus traski Gibbons, Proc. Ac. Nat. Sci. Phila. 1854, 105, lower Sacramento River.

Genus 601. ABEONA Girard.

Abeona Girard, Proc. Ac. Nat. Sci. Phila. 1855, 322 (*trowbridgii*=*minimus*).

1909. Abeona minima (Gibbons).

San Francisco to San Diego.

Cymatogaster minimus Gibbons, Proc. Ac. Nat. Sci. Phila. 1854, 125, San Francisco Bay.

1910. Abeona aurora Jordan & Gilbert.

Monterey Bay, California.

Abeona aurora Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 299, Monterey Bay, California.

Genus 602. CYMATOGASTER Gibbons.

Cymatogaster Gibbons, Daily Placer Times and Transcript, May 18, 1854 (*aggregatus* and *minimus*).

1911. Cymatogaster aggregatus Gibbons. *Sparada.*

Pacific Coast, from Port Wrangel, Alaska, to Todos Santos Bay.

Cymatogaster aggregatus Gibbons, Daily Placer Times and Transcript, May 18, 1854, San Francisco.

Genus 603. BRACHYISTIUS Gill.

Brachyistius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 275 (*frenatus*).

1912. Brachyistius frenatus Gill.

Vancouver Island to San Diego.

Brachyistius frenatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 275, California coast.

Genus 604. ZALEMBIUS Jordan & Evermann.

Zalembius Jordan & Evermann, Fishes N. and M. Amer., 1896 (*rosaceus*).

1913. Zalembius rosaceus (Jordan & Gilbert).

San Francisco, California.

Cymatogaster rosaceus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 303, off San Francisco.

Genus 605. HYPOCRITICHTHYS Gill.

Hypocritichthys Gill, Proc. Ac. Nat. Sci. Phila. 1862, 14, 275 (*analis*).

1914. Hypocritichthys analis (Alexander Agassiz).

San Francisco to Point Conception.

Hyperprosopon analis Alexander Agassiz, Proc. Bost. Soc. Nat. Hist. 1861, 133, San Francisco.

Genus 606. HYPERPROSOPON Gibbons.

Hyperprosopon Gibbons, Daily Placer Times and Transcript, May 18, 1854 (*argenteus*).

1915. Hyperprosopon argenteus Gibbons. *Walleye Surf-fish; White Perch.*

Coast of California, Cape Disappointment to Todos Santos Bay.

Hyperprosopon argenteum Gibbons, Proc. Ac. Nat. Sci. Phila. 1854, 105, San Francisco.

1916. Hyperprosopon agassizii Gill.

Coast of California, San Francisco to Santa Barbara; most common along San Luis Obispo County.

Hyperprosopon agassizii Gill, Proc. Ac. Nat. Sci. Phila. 1862, 276, California.

Genus 607. HOLCONOTUS Agassiz.

Holconotus Agassiz, Am. Jour. Sci. Arts, XVII, May, 1854, 367 (*rhodoterus*).

1917. Holconotus rhodoterus Agassiz.

Coast of California, San Francisco to San Diego.

Holconotus rhodoterus Agassiz, Am. Jour. Sci. Arts, May, 1854, 368, San Francisco.

Genus 608. AMPHISTICHUS Agassiz.

Amphistichus Agassiz, Am. Jour. Sci. Arts, May, 1854, 367 (*argenteus*).

1918. Amphistichus argenteus Agassiz. *Surf-fish.*

Pacific Coast from Cape Flattery to San Diego.

Amphistichus argenteus Agassiz, Am. Jour. Sci. Arts, May, 1854, 367, San Francisco.

Genus 609. EMBIOTOCA Agassiz.

Embiotoca Agassiz, Am. Jour. Sci. Arts, XVI, November, 1853, 386 (*jacksoni*).

1919. Embiotoca jacksoni Agassiz. *Common Surf-fish; Black Perch.*

Vancouver Island to San Diego.

Embiotoca jacksoni Agassiz, Am. Jour. Sci. Arts, 1853, 387, and 1854, 366, San Francisco.

Genus 610. TÆNIOTOCA Alexander Agassiz.

Tæniotoca A. Agassiz, Proc. Bost. Soc. Nat. Hist., VII, 1861, 133 (*lateralis*).

1920. Tæniotoca lateralis (Agassiz). *Blue Perch; Striped Surf-fish.*

Vancouver Island to San Diego.

Embiotoca lateralis Agassiz, Am. Jour. Sci. Arts, May, 1854, 366, San Francisco.

Genus 611. PHANERODON Girard.

Phanerodon Girard, Proc. Ac. Nat. Sci. Phila. 1854, 153 (*furcatus*).

1921. Phanerodon furcatus Girard. *White Surf-fish.*

Pacific Coast, from Vancouver Island to San Diego.

Phanerodon furcatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 163, Presidio and Tomales Bay, California.

1922. Phanerodon atripes (Jordan & Gilbert).

Monterey Bay and banks off San Diego.

Ditrema atripes Jordan & Gilbert, Proc. U. S. N. M. 1880, 320, Monterey Bay.

Genus 612. RHACOCHILUS Agassiz.

Rhacochilus Agassiz, Am. Jour. Sci. Arts, May, 1854, 367 (*toxotes*).

1923. Rhacochilus toxotes Agassiz. *Alfione.*

Coast of California, from San Francisco to San Diego.

Rhacochilus toxotes Agassiz, Am. Jour. Sci. Arts, May, 1854, 367, San Francisco.

Genus 613. HYPSURUS Alexander Agassiz.

Hypsurus Alexander Agassiz, Proc. Bost. Soc. Nat. Hist. 1861, 133 (*caryi*).

1924. Hypsurus caryi (Agassiz). *Bugara.*

Coast of California; very common from Cape Mendocino to San Diego.

Embiotoca caryi Agassiz, Am. Jour. Sci. Arts 1853, 389, and 1854, 366, San Francisco.

Genus 614. DAMALICHTHYS Girard.

Damalichthys Girard, Proc. Ac. Nat. Sci. Phila. 1855, 321 (*vacca*).

1925. Damalichthys argyrosomus (Girard). *White Perch; Porgee.*

Pacific Coast from Vancouver Island to San Diego.

Embiotoca argyrosoma Girard, Proc. Ac. Nat. Sci. Phila. 1855, 136, San Francisco.

Suborder CHROMIDES.

Family CLX. CICHLIDÆ. The Cichlids.

Genus 615. PETENIA Günther.

Petenia Günther, Cat., IV, 301, 1862 (*splendida*).

1926. Petenia splendida Günther.

Guatemala.

Petenia splendida Günther, Cat., IV, 301, 1862, Lake Peten, Guatemala.

Genus 616. ÆQUIDENS Eigenmann & Bray.

Æquidens Eigenmann & Bray, Ann. N. Y. Ac. Sci. 1894, 616 (*tetramerus*).

1927. Æquidens cœruleopunctatus (Kner & Steindachner).

East slope of the Isthmus of Panama.

Acara cœruleopunctata Kner & Steindachner, Sitz. Bayer. Akad. 1863, ? Rio Chagres, Panama.

Genus 617. CICHLASOMA Swainson.

Cichlasoma Swainson, Nat. Hist. Class. Fishes, etc., II, 230, 1839 (*punctatus*= *bimaculatus*).

Subgenus CICHLASOMA Swainson.

1928. Cichlasoma rectangulare (Steindachner).

Mexico.

Acara rectangularis Steindachner, Chromiden Mejicos, I, 1864, Mexico.

1929. Cichlasoma bartoni (Bean).

Hauzteca Potosina, in San Luis Potosi, Mexico.

Acara bartoni T. H. Bean, Proc. U. S. Nat. Mus. 1892, 286, Hauzteca Potosina, Mexico.

1930. Cichlasoma godmanni (Günther).

Guatemala.

Heros godmanni Günther, Cat., IV, 296, 1862, River of Cahabon, Guatemala.

1931. Cichlasoma sieboldii (Kner & Steindachner).

New Grenada, and from the west slope of Panama.

Heros sieboldii Kner & Steindachner, Abhandl. Bayer. Akad. Wiss. X, 1864, 13, pl. 2, fig. 2, New Grenada.

1932. Cichlasoma intermedium (Günther).

Guatemala.

Heros intermedius Günther, Cat., IV, 298, 1862, Lake Peten, Guatemala.

1933. Cichlasoma anguliferum (Günther).

Guatemala.

Heros angulifer Günther, Cat., IV, 298, 1862, Rio de Santa Yzabal, Guatemala.

1934. Cichlasoma fenestratum (Günther).

Rivers of southern Mexico.

Chromis fenestrata Günther, Proc. Zool. Soc. Lond. 1860, 318, Rio de la Lana, Mexico.

1935. Cichlasoma montezuma (Heckel).

Mexico.

Heros montezuma Heckel, Brazil. Fluss-Fische, 383, 1840, Mexico.

1936. Cichlasoma macracanthum (Günther).

Chiapam and Huamuchal.

Heros macracanthus Günther, Proc. Zool. Soc. Lond. 1864, 153, Chiapam and Huamuchal.

1937. Cichlasoma parma (Günther).

Mexico and Guatemala.

Heros parma Günther, Cat., IV, 285, 1862, Mexico and Guatemala.

1938. Cichlasoma margaritiferum (Günther).
Guatemala.
Heros margaritifer Günther, Cat., IV, 287, 1862, Lake Peten, Guatemala.

1939. Cichlasoma spilurum (Günther).
Rio Motagua, Guatemala.
Heros spilurus Günther, Cat., IV, 289, 1862, Rio Motagua.

1940. Cichlasoma longimanus (Günther).
Lake Nicaragua.
Heros longimanus Günther, Fish. Centr. Amer., 453, 1869, Lake Nicaragua.

1941. Cichlasoma bifasciatum (Steindachner).
Mexico.
Heros bifasciatus Steindachner, Chromiden Mejicos, 4, 1864, Mexico.

1942. Cichlasoma helleri (Steindachner).
Rio Teapa, Tabasco, Mexico.
Heros helleri Steindachner, Chromiden Mejicos, 8, 1864, Mexico.

1943. Cichlasoma balteatum (Gill & Bransford).
Lake Nicaragua.
Heros balteatus Gill & Bransford, Proc. Ac. Nat. Sci. Phila. 1877, 184, Lake Nicaragua.

1944. Cichlasoma rostratum (Gill & Bransford).
Lake Nicaragua.
Heros rostratus Gill & Bransford, Proc. Ac. Nat. Sci. Phila. 1877, 181, Lake Nicaragua.

1945. Cichlasoma malanopogon (Steindachner).
Central America.
Heros malanopogon Steindachner, Chromiden Mejicos 16, in Denkschr. Akad. Wiss. Wien, XXIII, 1864, 72, pl. 1, fig. 3, Central America.

1946. Cichlasoma melanurum (Günther).
Guatemala.
Heros melanurus Günther, Cat., 288, 1862, Lake Peten, Guatemala.

1947. Cichlasoma nebuliferum (Günther).
Mexico.
Chromis nebulifer Günther, Proc. Zool. Soc. Lond. 1860, 318, Mexico.

1948. Cichlasoma lentiginosum (Steindachner).
Mexico.
Heros lentiginosus Steindachner, Chromiden Mejicos, 6, 1864, Mexico.

1949. Cichlasoma deppii (Heckel).
Mexico.
Heros deppii Heckel, Brasil. Flussfische, 382, 1840, Mexico.

Subgenus ARCHOCENTRUS Gill.
Archocentrus Gill, Proc. Ac. Nat. Sci. Phila. 1877, 186 (*centrarchus*).

1950. Cichlasoma nigrofasciatum (Günther).
Lakes Atitlan, Amatitlan, and Nicaragua.
Heros nigrofasciatus Günther, Fish. Centr. Amer., 452, 1869, Lake Atitlan.

1951. Cichlasoma multispinosum (Günther).
Lake Managua, Guatemala.
Heros multispinosus Günther, Fish. Centr. Amer., 453, 1869, Lake Managua.

1952. Cichlasoma centrarchus (Gill & Bransford).
Lake Nicaragua.
Heros centrarchus Gill & Bransford, Proc. Ac. Nat. Sci. Phila. 1877, 185, Lake Nicaragua.

Genus 618. HEROS Heckel.

Heros Heckel, Ann. Wiener Mus. 1840, 362 (*severus*, etc., restricted by Jordan & Gilbert to *severus*).

1953. Heros friedrichsthalii Heckel.

Lake Peten, Lake Nicarauga and its outlet, Rio San Juan.
Heros friedrichsthalii Heckel, Brasil. Flussfische, 381, 1840, Rio San Juan.

1954. Heros salvini Günther.

Guatemala.
Heros salvini Günther, Cat., IV, 294, 1862, Rio de Santa Yzabal.

1955. Heros affinis Günther.

Lake Peten, Guatemala.
Heros affinis Günther, Cat., IV, 292, 1862, Lake Peten, Guatemala.

1956. Heros maculipinnis Steindachner.

Rio Xamapa, near Vera Cruz, Mexico.
Heros maculipinnis Steindachner, Chromiden Mejicos, 15, 1864, Rio Xamapa, near Vera Cruz, Mexico.

1957. Heros trimaculatus Günther.

Chiapam and Huamuchal.
Heros trimaculatus Günther, Fish. Centr. Amer., 461, 1869, Chiapam and Huamuchal.

1958. Heros labiatus Günther.

Lake Managua.
Heros labiatus Günther, Proc. Zool. Soc. Lond. 1864, 27, pl. 4, fig. 1, Lake Managua.

1959. Heros lobochilus Günther.

Lake Managua.
Heros lobochilus Günther, Fish. Centr. Amer., 457, 1869, Lake Managua.

1960. Heros erythræus Günther.

Lake Managua.
Heros erythræus Günther, Fish. Centr. Amer., 457, 1869, Lake Managua.

1961. Heros basilaris Gill & Bransford.

Lake Nicaragua.
Heros basilaris Gill & Bransford, Proc. Ac. Nat. Sci. Phila. 1877, 182, Lake Nicaragua.

1962. Heros nicaraguensis Günther.

Lake Nicaragua.
Heros nicaraguensis Günther, Proc. Zool. Soc. Lond. 1864, 153, Lake Nicaragua.

1963. Heros managuensis Günther.

Lake Managua.
Heros managuensis Günther, Fish. Centr. Amer., 463, 1869, Lake Managua.

1964. Heros citrinellus Günther.

Lake Nicaragua.
Heros citrinellus Günther, Proc. Zool. Soc. Lond. 1864, 153, Lake Nicaragua.

1965. Heros aureus Günther.

Lake Yzabal, Rio Motagua, and Lake Nicaragua.
Heros aureus Günther, Cat., IV, 292, 1862, Yzabal and Rio Motagua.

1966. Heros motaguensis Günther.

Rio Motagua and Lake Nicaragua.
Heros motaguensis Günther, Fish. Centr. Amer., 462, 1869, Rio Motagua.

1967. Heros oblongus Günther.

Rio Motagua.
Heros oblongus Günther, Fish. Centr. Amer., 464, 1869, Rio Motagua.

1968. Heros dovii Günther.

Lake Nicaragua.

Heros dovii Günther, Proc. Zool. Soc. Lond. 1864, 154, Lake Nicaragua.

1969. Heros gibbiceps Steindachner.

Rio Teapa, Tabasco, Mexico.

Heros gibbiceps Steindachner, Chromiden Mejicos, 12, 1864, Rio Teapa, Tabasco, Mexico.

1970. Heros microphthalmus Günther.

Rio Motagua.

Heros microphthalmus Günther, Cat., IV, 295, 1862, Rio Motagua.

1971. Heros urophthalmus Günther.

Lake Peten, Guatemala.

Heros urophthalmus Günther, Cat., IV, 291, 1862, Lake Peten, Guatemala.

1972. Heros troscheli Steindachner.

Mexico.

Heros troscheli Steindachner, Ichthyologische Notizen, IV, 12, 1867, Mexico.

1973. Heros cyanoguttatus (Baird & Girard).

Southwestern rivers of Texas and northeastern Mexico; basin of the Rio Grande; the only species of *Cichlidæ* entering the United States.

Herichthys cyanoguttatus Baird & Girard, Proc. Ac. Nat. Sci. Phila., VII, 1854, 25, Rio Grande, Brownsville, Texas.

1974. Heros pavonaceus Garman.

Spring near Monclova, in Coahuila, Mexico.

Heros pavonaceus Garman, Bull. Mus. Comp. Zool., VIII, 93, 1881, spring near Monclova, in Coahuila.

1975. Heros altifrons Kner & Steindachner.

Isthmus of Panama and southward.

Heros altifrons Kner & Steindachner, Sitzungsber. Bayer. Akad. 1863, 223, New Grenada.

1976. Heros beani Jordan. *Mojarra Verde.*

Rio Presidio, Mazatlan, Mexico.

Heros beani Jordan, Proc. U. S. Nat. Mus. 1888, 332, Rio Presidio, Mazatlan.

1977. Heros tetracanthus (Cuvier & Valenciennes). *Viajaca.*

Rivers of Cuba.

Centrarchus tetracanthus Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 460, 1831, Cuba.

Genus 619. THERAPS Günther.

Therapsi Günther, Cat., IV, 284, 1862 (*irregularis*).

1978. Theraps irregularis Günther.

Guatemala.

Theraps irregularis Günther, Cat., IV, 284, 1862, Guatemala.

Genus 620. NEETROPLUS Günther.

Neetroplus Günther, Fish. Centr. Amer., 469, 1869 (*nematropus*).

1979. Neetroplus nematropus Günther.

Lake Managua.

Neetroplus nematropus Günther, Fish. Centr. Amer., 470, 1869, Lake Managua.

1980. Neetroplus nicaraguensis Gill & Bransford.

Lake Nicaragua.

Neetroplus nicaraguensis Günther, Proc. Ac. Nat. Sci. Phila. 1877, 186, Lake Nicaragua.

Genus 621. SATANOPERCA Günther. *Pappatarros.*

Satanoperca Günther, Cat., IV, 312, 1862 (*dæmon*).

1981. Satanoperca crassilabris Steindachner.

Panama.

Geophagus (*Satanoperca*) *crassilabris* Steindachner, Verh. Ak. Wiss. Wien 1876, 65, Panama.

Agnosia hirsuta
Doctor I.

Family CLXI. POMACENTRIDÆ. Demoiselles.

Genus 622. CHROMIS Cuvier. *Chauffe-Soleils.*

Chromis Cuvier, Mémoires du Mus. d'Hist. Nat., I, 353, 1815 (*chromis*).

Subgenus FURCARIA Poey.

Furcaria Poey, Memorias, II, 194, 1860 (*puncta*).

1982. Chromis atrilobata Gill.

Pacific Coast of America, from Cape San Lucas and southward.

Chromis (*Furcaria*) *atrilobata* Gill, Proc. Ac. Nat. Sci. Phila. 1862, 149, Cape San Lucas, Lower California.

1983. Chromis cyaneus (Poey).

Cuba.

Furcaria cyanea Poey, Memorias, II, 196, 1860, Havana.

1984. Chromis multilineatus (Guichenot).

Cuba. Jamaica

Heliases multilineatus Guichenot, in Ramon de la Sagra, Poiss. Cuba, 76, pl. 2, fig. 2, 1855, Havana.

Subgenus AYRESIA Cooper.

Ayresia Cooper, Proc. Cal. Ac. Sci. 1863, 73 (*punctipinnis*).

1985. Chromis punctipinnis (Cooper). *Blacksmith.*

Coast of California, from Point Conception to Cerros Island.

Ayresia punctipinnis Cooper, Proc. Cal. Ac. Sci. 1863, 73, San Diego Bay, San Pedro, and Santa Barbara.

Subgenus HELIASES Cuvier & Valenciennes.

Heliases Cuvier & Valenciennes, Hist. Nat. Poiss., V, 495, 1830 (*insolatus*).

1986. Chromis insolatus (Cuvier & Valenciennes). *Chauffe-Soleil.*

West Indies, north to Pensacola.

Heliases insolatus Cuvier & Valenciennes, Hist. Nat. Poiss., V, 494, pl. 137, 1830, Martinique.

1987. Chromis enchrysurus Jordan & Gilbert.

Snapper Banks, off Pensacola and Tampa, Florida.

Chromis enchrysurus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 286, Pensacola, Florida.

Genus 623. EUPOMACENTRUS Bleeker. *Pescados Azules.*

Eupomacentrus Bleeker, Nat. Verh. Holl. Maats. Weten., II, 1877, 73 (*lividus*).

Subgenus EUPOMACENTRUS Bleeker.

1988. Eupomacentrus leucorus (Gilbert).

Socorro Island, one of the Revillagigedo group, off west coast of Mexico.

Pomacentrus leucorus Gilbert, Proc. U. S. Nat. Mus. 1891, 554, Socorro Island.

1989. Eupomacentrus adustus (Troschel).

Cuba.

Pomacentrus adustus Troschel, in J. W. von Müller's Reise in Mexico, 633, 1865, Mexico.

1990. Eupomacentrus fuscus (Cuvier & Valenciennes). *Maria Molle.*

West Indies and coast of Brazil north to Key West.

Pomacentrus fuscus Cuvier & Valenciennes, Hist. Nat. Poiss., V, 432, 1830, Brazil.

1991. Eupomacentrus rectifrænum (Gill). *Pescado Azul.*

Pacific Coast of America, from Cape San Lucas to Panama.

Pomacentrus rectifrænum Gill, Proc. Ac. Nat. Sci. Phila. 1862, 148, Cape San Lucas, Lower California.

1992. Eupomacentrus analis (Poey).
Cuba and Key West.
Pomacentrus analis Poey, Synopsis, 327, 1867, Havana.

1993. Eupomacentrus otophorus (Poey).
Cuba.
Pomacentrus otophorus Poey, Memorias, II, 188, 1860, Havana.

1994. Eupomacentrus leucostictus (Müller & Troschel). *Beau Gregory; Black Pilot.*
West Indies to Snapper Banks, west Florida.
Pomacentrus leucostictus Müller & Troschel, in Schomburgk's Hist. Barbados, 674, 1848, Barbados.

1995. Eupomacentrus flaviventer (Troschel).
Atlantic Coast of Mexico.
Pomacentrus flaviventer Troschel, in Von Müller's Reise in Mexico, etc., 633, 1865, "Atlantic Ocean."

1996. Eupomacentrus flavilatus (Gill). *Pescado Azul de dos Colores.*
Pacific Coast of America, from Cape San Lucas to Mazatlan and beyond.
Pomacentrus flavilatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 148, Cape San Lucas, Lower California.

1997. Eupomacentrus partitus (Poey).
Cuba.
Pomacentrus partitus Poey, Synopsis, 327, 1867, Havana.

1998. Eupomacentrus planifrons (Cuvier & Valenciennes). *Petite Jaquette.*
West Indies, from Jamaica to Martinique.
Pomacentrus planifrons Cuvier & Valenciennes, Hist. Nat. Poiss., V, 431, 1830, Martinique.

Genus 624. ABUDEFDUF Forskål. *Pintanos.*
Abudefduf Forskål, Descr. Anim., etc., 59, 1775 (*sordidus*).

Subgenus GLYPHISODON Lacépède.
Glyphisodon Lacépède, Hist. Nat. Poiss., IV, 542, 1803 (*moncharia*).

1999. Abudefduf saxatilis (Linnæus). *Pintano; Cow-pilot; Jaqueta; Mojarra Raiado; Demoiselle.*
Both coasts of tropical America.
Chætodon saxatilis Linnæus, Syst. Nat., ed. x, 276, 1758, "India"; after Mus. Adolph Frederici.

2000. Abudefduf declivifrons (Gill).
Pacific Coast of tropical America, from Cape San Lucas southward.
Euschistodus declivifrons Gill, Proc. Ac. Nat. Sci. Phila. 1862, 145, Cape San Lucas.

2001. Abudefduf analogus (Gill).
Atlantic Coast of Central America.
Euchistodus analogus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 219, Aspinwall.

2002. Abudefduf taurus (Müller & Troschel). *Dovetail-fish.*
Glyphidodon taurus Müller & Troschel, in Schomburgk's History of Barbados, 674, 1848, Barbados.

2003. Abudefduf rudis (Poey).
Cuba.
Glyphidodon rudis Poey, Memorias, II, 191, 1860, Havana.

Genus 625. HYPSYPOPS Gill. *Garibaldis.*
Hypsypops Gill, Proc. Ac. Nat. Sci. Phila. 1861, 165 (*rubicundus*).

2004. Hypsypops rubicundus (Girard). *Garibaldi.*
Coast of California south to Point Conception.
Glyphisodon rubicundus Girard, Proc. Ac. Nat. Sci. Phila. 1864, 148, Monterey, California.

Mexilaris concolor Gill
Panama

Genus 626. MICROSPATHODON Günther.
Microspathodon Günther, Cat., IV, 35, 1862 (*chrysurus*).

2005. Microspathodon chrysurus (Cuvier & Valenciennes).
West Indies, Cuba and St. Thomas.
Glyphidodon chrysurus Cuv. & Val., Hist. Nat. Poiss., V, 476, 1830, St. Thomas.

2006. Microspathodon bairdii (Gill).
Pacific Coast of tropical America, from Cape San Lucas to Panama.
Pomacentrus bairdii Gill, Proc. Ac. Nat. Sci. Phila. 1862, Cape San Lucas.

Large expan
Socorro
Clar

2007. Microspathodon niveatus. (Poey).
Cuba.
Pomacentrus niveatus Poey, Enumeratio, 102, 1875, Havana.

2008. Microspathodon dorsalis (Gill).
Pacific Coast of America, from Cape San Lucas to Mazatlan.
Hypsypops dorsalis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 147, Cape San Lucas.

2008 a. Microspathodon dorsalis azurissimus Jordan & Starks.
Mazatlan, Mexico, Panama.
Microspathodon azurissimus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 478, pl. 44, Venados Islands, Mazatlan.

2008 b. Microspathodon dorsalis cinereus Gilbert.
Clarion and Socorro islands and Panama.
Microspathodon cinereus Gilbert, Proc. U. S. Nat. Mus. 1890, 50, Clarion and Socorro islands.

Suborder PHARYNGOGNATHI. The Labroid Fishes.

Family CLXII. LABRIDÆ. The Wrasse-Fishes.

Genus 627. CENTROLABRUS Günther. *Rock Cooks.*
Centrolabrus Günther, Cat., IV, 92, 1862 (*exoletus*).

2009. Centrolabrus exoletus (Linnæus). *Rock Cook.*
Coasts of northern Europe south to Cornwall; Greenland.
Labrus exoletus Linnæus, Syst. Nat., ed. X, 274, 1758, Atlantic Ocean.

Genus 628. TAUTOGOLABRUS Günther. *Cunners.*
Tautogolabrus Günther, Cat., IV, 89, 1862 (*burgall* = *adspersus*).

2010. Tautogolabrus adspersus (Walbaum). *Cunner; Chogset; Blue Perch; Bergall* (*Berg-gylt*).
Atlantic coasts of North America, from Labrador to Sandy Hook.
Labrus adspersus Walbaum, Artedi Piscium, 254, 1792; after *Bergall* of Schöpf, no locality.

Genus 629. TAUTOGA Mitchill. *Tautogs.*
Tautoga Mitchill, Report Fishes New York, 23, 1814 (*tautoga*).

2011. Tautoga onitis (Linnæus). *Tautog; Blackfish; Oyster-fish.*
Atlantic coasts of United States, Cape Ann to Charleston.
Labrus onitis Linnæus, Syst. Nat., ed. X, 286, 1758, locality unknown.

Genus 630. LACHNOLAIMUS Cuvier & Valenciennes. *Capitaines.*
Lachnolaimus Cuvier & Valenciennes, Hist. Nat. Poissons, XIII, 274, 1839 (*aigula* = *maximus*).

2012. Lachnolaimus maximus (Walbaum). *Hogfish; Capitaine; Perro Perro.*
West Indies, north to Key West and the Bermudas.
Labrus maximus Walbaum, Artedi Piscium, 261, 1792, no locality; after Catesby.

Genus 631. HARPE Lacépède. *Lady-fishes.*

Harpe Lacépède, Hist. Nat. Poiss., IV, 426, 1802 (*cœruleo-aureus* = *rufa*).

2013. Harpe diplotænia Gill.

Pacific Coast of tropical America; Cape San Lucas; Panama; Revillagigedo Islands; Mazatlan.

Harpe diplotænia Gill, Proc. Ac. Nat. Sci. Phila. 1862, 140, Cape San Lucas.

2014. Harpe rufa (Linnæus). *Lady-fish; Spanish Lady-fish; Spanish Hog-fish; Pudiano; Perro Colorado.*

West Indies, north to Key West, south to Rio de Janeiro.

Labrus rufus Linnæus, Syst. Nat., ed. X, 284, 1758, in America; after Catesby.

2015. Harpe eclancheri (Valenciennes).

Galapagos Islands.

Cossyphus eclancheri Valenciennes, Voy. Vénus, Zool., 340, Poiss., pl. 8, fig. 2, plates 1846, text 1855, Galapagos Islands.

2016. Harpe pulchella (Poey).

Cuba.

Cossyphus pulchellus Poey, Memorias, II, 208, 1860, Havana.

Genus 632. DECODON Günther.

Decodon Günther, Cat., IV, 101, 1862 (*puellaris* Poey).

2017. Decodon puellaris (Poey).

West Indies; Cuba; Barbados; Snapper Banks.

Cossyphus puellaris Poey, Memorias, II, 210, 1860, Havana.

Genus 633. PIMELOMETOPON Gill. *Fat-heads.*

Pimelometopon Gill, Proc. Ac. Nat. Sci. Phila. 1864, 58 (*pulcher*).

2018. Pimelometopon pulcher (Ayres). *California Redfish; Fat-head.*

Southern California, from Point Conception to Ascension Island, Lower California.

Labrus pulcher Ayres, Proc. Cal. Ac. Sci., I, 1854, 3, San Diego.

2019. Pimelometopon darwinii (Jenyns).

Galapagos Islands.

Cossyphus darwinii Jenyns, Voy. Beagle, Fishes, 100, pl. 20, 1842, Chatham Island, Galapagos Archipelago.

Genus 634. CLEPTICUS Cuvier & Valenciennes.

Clepticus Cuvier & Valenciennes, Règne Animal, ed. II, vol. 2, 201, 1829 (*genizara* = *parræ*).

2020. Clepticus parræ (Bloch & Schneider). *Genizara; Janissary.*

West Indies.

Brama parræ Bloch & Schneider, Syst. Ichth., 100, 1801, Havana.

Genus 635. IRIDIO Jordan & Evermann.

Iridio Jordan & Evermann, Fishes North and Middle America, 1896 (*radiatus*).

2021. Iridio radiatus (Linnæus). *Pudding Wife; Doncella; Pudiano Verde.*

West Indies, Brazil north to Florida Keys, Bermuda and St. Paul Rocks.

Labrus radiatus Linnæus, Syst. Nat., ed. X, 288, 1758, Bahamas; based on Catesby.

2022. Iridio nicholsi (Jordan & Gilbert).

Revillagigedo and Galapagos islands.

Platyglossus nicholsi Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 231, Braithwaite Bay, Socorro Island.

2023. Iridio sellifer (Gilbert).

Revillagigedo Archipelago.

Halichares sellifer Gilbert, Proc. U. S. Nat. Mus. 1890, 67, Clarion Island.

2024. Iridio semicinctus (Ayres). *Kelpfish; Señorita.*
Southern California, Santa Barbara Islands to Cerros Island.
Julis semicinctus Ayres, Proc. Cal. Ac. Sci. 1859, 32, Cerros Island, off coast Lower California.

2025. Iridio garnoti (Cuvier & Valenciennes).
West Indies, Cuba, Martinique, St. Croix.
Julis garnoti Cuv. & Val., Hist. Nat. Poiss., XIII, 390, 1839, Martinique.

2026. Iridio cyanocephalus (Bloch).
West Indies, south to Brazil.
Labrus cyanocephalus Bloch, Ichthyol., pl. 286, 1791, locality unknown, Museum of Link.

2027. Iridio maculipinna (Müller & Troschel).
West Indies to Beaufort, North Carolina.
Julis maculipinna Müller & Troschel, in Schomburgk, Hist. Barbados, 674, 1848, Barbados.

2028. Iridio bivittatus (Bloch). *Slippery Dick; Doncella.*
West Indies, north to Beaufort, North Carolina, and south to Brazil.
Labrus bivittatus Bloch, Ichthyol., pl. 284, fig. 1, 1792; from a painting by Plumier made at Martinique.

2029. Iridio dispilus (Günther).
Pacific Coast of tropical America, Mazatlan to Panama.
Platyglossus dispilus Günther, Proc. Zool. Soc. Lond. 1864, 25, Panama.

2030. Iridio kirschii Jordan & Evermann.
West Indies, south to Bahia; Cuba; Jamaica; St. Croix.
Iridio kirschii Jordan & Evermann, Fishes N. and M. Amer. 1896, Jamaica.

2031. Iridio poeyi (Steindachner).
Surinam.
Platyglossus poeyi Steindachner, Ichth. Notizen, VI, 49, 1867, Surinam.

2032. Iridio caudalis (Poey).
Cuba.
Julis caudalis Poey, Memorias, II, 213, 1860, Havana.

2033. Iridio pictus (Poey).
West Indies, north to the Snapper Banks off Pensacola.
Julis pictus Poey, Memorias, II, 214, 1860, Havana.

Genus 636. OXYJULIS Gill. *Señoritas.*
Oxyjulis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 330 (*modestus*).

2034. Oxyjulis modestus (Girard). *Señorita.*
Coast of southern California; Monterey to Guadalupe Island.
Julis modestus Girard, Proc. Ac. Nat. Sci. Phila., VII, 1854, 151, San Diego, Monterey, and San Miguel.

Genus 637. EMMEKKIA Jordan & Evermann.
Emmeekia Jordan & Evermann, Fishes N. and M. America, 1896 (*venustus*).

2035. Emmeekia venusta (Jenkins & Evermann).
Gulf of California.
Pseudojulis venustus Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 145, Guaymas, Sonora.

Genus 638. JULIDIO Jordan & Evermann.
Julidio Jordan & Evermann, Fishes North and Middle America, 1896 (*adustus*).

2036. Julidio adustus (Gilbert).
Revillagigedo Islands.
Pseudojulis adustus Gilbert, Proc. U. S. Nat. Mus. 1890, 66, Socorro Island.

2037. Julidio notospilus (Günther).
Pacific Coast of Mexico, Mazatlan to Panama.
Pseudojulis notospilus Günther, Proc. Zool. Soc. Lond. 1864, 26, Panama.

Genus 639. PSEUDOJULIS Bleeker.

Pseudojulis Bleeker, Proc. Zool. Soc. Lond. 1861, 412 (*girardi*).

2038. Pseudojulis inornatus Gilbert.

Pacific Coast of Mexico; only the type known.
Pseudojulis inornatus Gilbert, Proc. U. S. N. M. 1890, 67, west coast of Mexico.

2039. Pseudojulis melanotis Gilbert.

Pacific Coast of Mexico; only the type known.
Pseudojulis melanotis Gilbert, Proc. U. S. N. M. 1890, 67, west coast of Mexico.

Genus 640. CHLORICHTHYS Swainson.

Chlorichthys Swainson, Nat. Hist. Class. Fishes, II, 232, 1839 (*bifasciatus*, etc.).

2040. Chlorichthys lucasanus (Gill).

Gulf of California, Cape San Lucas to Mazatlan and Tres Marias.
Julis lucasanus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 142, Cape San Lucas.

2041. Chlorichthys socorroensis (Gilbert).

Revillagigedo Archipelago.
Thalassoma socorroense Gilbert, Proc. U. S. Nat. Mus. 1890, 69, Socorro Island.

2042. Chlorichthys nitidus (Günther).

West Indies, Jamaica.
Julis nitida Günther, Cat., IV, 190, 1862, Jamaica.

2043. Chlorichthys nitidissimus (Goode).

Bermudas.
Julis nitidissima Goode, Am. Jour. Sci. Arts 1877, 293, Bermudas.

2044. Chlorichthys steindachneri (Jordan).

Acapulco, west coast of Mexico.
Thalassoma steindachneri Jordan, Review Labroid Fishes, 654, 1887 (1890), Acapulco; after Steindachner.

2045. Chlorichthys bifasciatus (Bloch).

West Indies, Cuba, Jamaica, San Domingo, and Martinique.
Labrus bifasciatus Bloch, Ichthyol., 131, pl. 283, 1792, West Indies.

2046. Chlorichthys grammaticus (Gilbert).

Revillagigedo Archipelago.
Thalassoma grammaticum Gilbert, Proc. U. S. Nat. Mus. 1890, 68, Socorro Island; Clarion Island.

2047. Chlorichthys virens (Gilbert).

Revillagigedo Archipelago.
Thalassoma virens Gilbert, Proc. U. S. Nat. Mus. 1890, 68, Socorro Island.

Genus 641. DORATONOTUS Günther.

Doratonotus Günther, Cat., IV, 124, 1862 (*megalepis*).

2048. Doratonotus megalepis Günther.

West Indies, north to Key West.
Doratonotus megalepis Günther, Cat., IV, 125, 1862, St. Christopher.

Genus 642. XYRULA Jordan.

Xyrula Jordan, Review Labroid Fishes, 656, 1887 (1890) (*jessiæ*).

2049. Xyrula jessiæ (Jordan).

Snapper Banks, off Tampa, Florida.
Xyrichthys jessiæ Jordan, Proc. U. S. N. M. 1887, 698, off Tampa Bay, Florida.

Genus 643. NOVACULICHTHYS Bleeker.

Noraculichthys Bleeker, Proc. Zool. Soc. Lond. 1861, 414 (*macrolepidotus*).

2050. Novaculichthys rosipes (Jordan & Gilbert).

Key West, Florida.
Xyrichthys rosipes Jordan & Gilbert, Proc. U. S. N. M. 1884, 27, Key West.

2051. Novaculichthys ventralis (Bean).

Cozumel Island, Yucatan.
Xyrichthys ventralis Bean, Bull. U. S. F. C. 1888, 198, pl. 29, fig. 1, Cozumel.

2052. Novaculichthys infirmus (Bean).
Cozumel, Yucatan.
Xyrichthys infirmus Bean, Bull. U. S. F. C. 1888, 199, pl. 29, fig. 2, Cozumel.

2053. Novaculichthys martinicensis (Cuvier & Valenciennes).
Martinique.
Xyrichthys martinicensis Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 49, 1839, Martinique.

Genus 644. XYRICHTHYS Cuvier *Razor-fishes.*
Xyrichthys Cuvier, Mém. Mus. d'Hist. Nat., I, 324, 329, 1815 (*novacula*).

2054. Xyrichthys mundiceps Gill.
Cape San Lucas, Lower California.
Xyrichthys mundiceps Gill, Proc. Ac. Nat. Sci. Phila. 1862, 143, Cape San Lucas.

2055. Xyrichthys psittacus (Linnæus). *Razor-fish.*
West Indies, north to Pensacola and Charleston.
Coryphæna psittacus Linnæus, Syst. Nat., ed. XII, 448, 1766, Charleston, S. C.

2056. Xyrichthys modestus Poey.
Cuba.
Xyrichthys modestus Poey, Repertorio, II, 238, 1867, Havana.

Genus 645. INIISTIUS Gill.
Iniistius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 143 (*pavo*).

2057. Iniistius mundicorpus Gill.
Rocky islands on Pacific Coast of Mexico.
Iniistius mundicorpus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 145, Cape San Lucas.

Family CLXIII. SCARIDÆ. The Parrot-Fishes.

Genus 646. CRYPTOTOMUS Cope.
Cryptotomus Cope, Trans. Amer. Philos. Soc. 1871, 462 (*roseus*).

2058. Cryptotomus dentiens (Poey).
Cuba.
Calliodon dentiens Poey, Memorias, II, 422, 1861, Cuba.

2059. Cryptotomus retractus (Poey).
West Indies, north to Pensacola.
Calliodon retractus Poey, Synopsis, 345, 1868, Havana.

2060. Cryptotomus ustus (Cuvier & Valenciennes).
West Indies, north to Charleston, south to Bahia.
Calliodon ustus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 286, 1839, Brazil.

2061. Cryptotomus auropunctatus (Cuvier & Valenciennes).
San Domingo.
Callyodon auropunctatus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 290, 1839, San Domingo.

2062. Cryptotomus beryllinus Jordan & Swain.
Florida Keys, north to New Jersey, south to Rio Janeiro.
Cryptotomus beryllinus Jordan & Swain, Proc. U. S. N. M. 1884, 101, Havana.

2063. Cryptotomus roseus Cope.
West Indies, south to Brazil.
Cryptotomus roseus Cope, Trans. Am. Phil. Soc., XIII, 1869, 462, St. Martins.

Genus 647. CALOTOMUS Gilbert.
Calotomus Gilbert, Proc. U. S. Nat. Mus. 1890, 70 (*xenodon*).

2064. Calotomus xenodon Gilbert.
Socorro Island, Rivillagigedo Archipelago.
Calotomus xenodon Gilbert, Proc. U. S. Nat. Mus. 1890, 70, Socorro Island.

Genus 648. SPARISOMA Swainson. *Viejas.*

Sparisoma Swainson, Nat. Hist. Class. Fishes, etc., II, 227, 1839 (*abildgaardi*).

Subgenus SPARISOMA Swainson.

2065. Sparisoma xystrodon Jordan & Swain.

West Indies, north to Key West.

Sparisoma xystrodon Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 99, Key West; Havana.

2066. Sparisoma atomarium (Poey).

Cuba.

Scarus atomarius Poey, Memorias, II, 423, 1861, Havana.

2067. Sparisoma radians (Cuvier & Valenciennes).

West Indies, south to Brazil.

Scarus radians Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 206, 1839, Brazil.

2068. Sparisoma hoplomystax (Cope).

West Indies, from Key West to Bahia.

Scarus hoplomystax Cope, Trans. Amer. Philos. Soc 1869, 462, St. Martins.

2069. Sparisoma niphobles Jordan & Bollman.

Bahamas; only type known.

Sparisoma niphobles Jordan & Bollman, Proc. U. S. Nat. Mus. 1888, 551, Green Turtle Cay, Bahamas.

2070. Sparisoma aurofrenatum (Cuvier & Valenciennes). ✓

West Indies.

Scarus aurofrenatus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 191, 1839, San Domingo.

2071. Sparisoma oxybrachium (Poey).

Cuba.

Scarus oxybrachius Poey, Synopsis, 342, 1868, Havana.

2072. Sparisoma abildgaardi (Bloch). *Red Parrot-fish.*

West Indies, south to Brazil.

Scarus abildgaardi Bloch, Ichthyol., pl. 259, 1791, "America."

2073. Sparisoma distinctum (Poey). Synonym for Sides

Cuba.

Scarus distinctus Poey, Memorias, II, 423, 1861, Havana.

2074. Sparisoma chrysopterum (Bloch & Schneider). *Vieja.* ✓

West Indies, south to Bahia.

Scarus chrysopterus Bloch & Schneider, Syst. Ichth., 286, pl. 57, 1801, "American seas."

2075. Sparisoma lorito Jordan & Swain. ✓

West Indies.

Sparisoma lorito Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 95, Havana.

2076. Sparisoma viride (Bonnaterre). *Green Parrot-fish.* ✓

West Indies.

Scarus viridis Bonnaterre, Enc. Meth., X, 96, 193, 1788, Bahamas; after Catesby.

Subgenus EUSCARUS Jordan & Evermann.

Euscarus Jordan & Evermann, Fishes N. and M. Amer., 1896 (*cretensis*).

2077. Sparisoma strigatum (Günther).

Locality unknown; but as the genus *Sparisoma* is chiefly confined to American waters, this species is probably American.

Scarus strigatus Günther, Cat., IV, 212, 1862, locality unknown.

2078. Sparisoma flavescens (Bloch & Schneider). *Vieja Colorado; Vieja Muger.*

West Indies; Key West to Rio Janeiro.

Scarus flavescens Bloch & Schneider, Syst. Ichth., 290, 1801, Cuba; after Parra.

rubripinne Cuv.

2079. Sparisoma truncatum (Poey)
Cuba.
Scarus truncatus Poey, Synopsis, 339, 1868, Havana.

2080. Sparisoma circumnotatum (Poey). = rubripinne
Cuba.
Scarus circumnotatus Poey, Memorias, II, 423, 1861, Havana.

2081. Sparisoma frondosum (Cuvier).
West Indies, south to Brazil.
Scarus frondosus Cuvier, in Agassiz, Spix, Pisc. Brasil., 98, 1829, Bahia.

2082. Sparisoma brachialis (Poey).
Cuba.
Scarus brachialis Poey, Memorias, II, 345, 1861, Cuba.

2083. Sparisoma maschalespilos (Bleeker).
Surinam.
Scarus maschalespilos Bleeker, Notices Ichthyologiques, I-X, 5, 1862, Surinam.

2084. Sparisoma aracanga (Günther). = frondosum agassizi
Jamaica.
Scarus aracanga Günther, Cat., IV, 209, 1862, Jamaica.

Genus 649. SCARUS Forskål. *Loros; Parrot-fishes.*
Scarus Forskål, Descr. Animal, etc., in Orient. Obs., 25, 1775 (*psittacus*, etc.).

Subgenus SCARUS Forskål.

2085. Scarus punctulatus Cuvier & Valenciennes.
West Indies.
Scarus punctulatus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 195, 1839, Martinique.

2086. Scarus bollmani Jordan & Evermann.
Gulf of Mexico, in moderately deep water.
Scarus bollmani Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 470, off Tampa Bay, Florida.

2087. Scarus tæniopterus Desmarest.
West Indies.
Scarus tæniopterus Desmarest, Dict. Classique, XV, 244, pl. 12, 1831, Cuba.

2088. Scarus aracanga (Günther).
West Indies.
Pseudoscarus aracanga Günther, Cat., IV, 227, 1862, Jamaica.

2089. Scarus trispinosus Cuvier & Valenciennes.
Brazil.
Scarus trispinosus Cuv. & Val., Hist. Nat. Poiss., XIV, 182, 1839, Brazil.

2090. Scarus cozumilæ Bean.
Cozumel Island, Yucatan.
Scarus cozumilæ Bean, Bull. U. S. Fish Com. 1888, 196, Cozumel.

2091. Scarus vetula (Bloch & Schneider). *Mudfish; Vieja; Old Wife.*
West Indies.
Scarus vetula Bloch & Schneider, Ichthyol., 289, 1801, Cuba.

2092. Scarus gnathodus Poey.
Cuba.
Scarus gnathodus Poey, Repertorio, II, 240, 1867, Havana.

Subgenus CALLIODON Gronow.
Calliodon Gronow, in Bloch & Schneider, Syst. Ichth., 312, 1801 (*lineatus* = *croicensis*).

2093. Scarus croicensis (Bloch). *Bullon.*
West Indies, north to Key West.
Scarus croicensis Bloch, Ichthyol., pl. 221, 1790, St. Croix.

2094. Scarus evermanni Jordan.

Gulf of Mexico, in moderately deep water.

Scarus evermanni Jordan, Proc. U. S. Nat. Mus. 1886, 469, off Tampa Bay, in moderately deep water.

2095. Scarus flavomarginatus Cuvier & Valenciennes.

Martinique.

Scarus flavomarginatus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 202, 1839, Martinique.

2096. Scarus acutus Poey. *Loro.*

Cuba.

Scarus acutus Poey, Memorias, II, 216, 1861, Havana.

2097. Scarus cœruleus (Bloch). *Blue Parrot-fish; Loro; Clamagore.*

West Indies; Chesapeake Bay.

Coryphæna cœrulea Bloch, Ausländische Fische, II, 120, pl. 176, 1786, probably Martinique; in part after Catesby.

Genus 650. PSEUDOSCARUS Bleeker. *Guacamaias.*

Pseudoscarus Bleeker, Versl. Akad. Wet. Amsterdam, Scaroïden, XII, 1861, 3 (*microrrhinos*).

Subgenus PSEUDOSCARUS Bleeker.

2098. Pseudoscarus cœlestinus (Cuvier & Valenciennes). *Loro.*

West Indies.

Scarus cœlestinus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 180, 1839, St. Thomas.

2099. Pseudoscarus simplex Poey.

Cuba.

Pseudoscarus simplex Poey, Repertorio, I, 185, 1867, Havana.

2100. Pseudoscarus pleianus (Poey).

St. Thomas; only the type known.

Scarus pleianus Poey, Memorias, II, 393, 1861, St. Thomas.

Subgenus LORO Jordan & Evermann.

Loro Jordan & Evermann, Fishes N. and M. America, 1896 (*guacamaia*).

2101. Pseudoscarus guacamaia (Cuvier). *Guacamaia; Green Parrot-fish.*

West Indies, north to Florida Keys (straying to St. Augustine), south to Rio de Janeiro.

Scarus guacamaia Cuvier, Règne Animal, ed. II, vol. 2, 265, 1829, Cuba; after Parra.

2102. Pseudoscarus perrico (Jordan & Gilbert).

Pacific Coast of Mexico, from La Paz to Mazatlan.

Scarus perrico Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 357, Mazatlan.

Group ZEOIDEI.

Family CLXIV. ZEIDÆ. The John Dories.

Genus 651. ZENOPSIS Gill.

Zenopsis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 126 (*nebulosus*).

2103. Zenopsis ocellatus (Storer).

Taken off Provincetown, Massachusetts.

Zeus ocellatus Storer, Proc. Bost. Soc. Nat. Hist., VI, 1858, 386, off Provincetown, Massachusetts.

Genus 652. ZENION Jordan & Evermann.

Zenion Jordan & Evermann, Fishes North and Middle America, 1896 (*hololepis*).

2104. Zenion hololepis (Goode & Bean).

Yucatan; Little Bahama Bank.

Cyttus hololepis Goode & Bean, Oceanic Ichthyology, 225, figs. 233, 233*a*, and 233*b*, 1896, off Yucatan and Little Bahama Bank.

2114. Chætodon sedentarius Poey.

West Indian fauna.
Chætodon sedentarius Poey, Memorias, II, 203, 1860, Cuba.

2115. Chætodon aya Jordan.

Gulf of Mexico.
Chætodon aya Jordan, Proc. U. S. Nat. Mus. 1886, 225, Snapper Banks, near Pensacola, Florida.

Subgenus TETRAGONOPTRUS (Klein) Bleeker.

Tetragonoptrus Klein, Historia Piscium, 37, 1744 (many species, *striatus*, etc.).

2116. Chætodon striatus Linnæus. *Portuguese Butterfly.*

West Indies.
Chætodon striatus Linnæus, Syst. Nat., ed. x, 275, 1758, "India."

2117. Chætodon atæniatus (Poey).

Havana, Cuba.
Sarothrodus atæniatus Poey, Synopsis, 353, 1868, Havana.

Subgenus CHÆTODON (Artedi) Linnæus.

2118. Chætodon capistratus Linnæus. *Parche.*

West Indies; Havana.
Chætodon capistratus Linnæus, Syst. Nat., ed. x, 275, 1758, India.

Genus 659. POMACANTHUS Lacépède. *Chiriritas.*

Pomacanthus Lacépède, Hist. Nat. Poiss., IV, 517, 1803 (*arcuatus*, as restricted by Cuvier).

Subgenus POMACANTHUS Lacépède.

2119. Pomacanthus arcuatus (Linnæus). *Black Angel; Chiririta.*

West Indies; north to New Jersey; south to Bahia.
Chætodon arcuatus Linnæus, Syst. Nat., ed. x, 273, 1758, India.

2120. Pomacanthus paru (Bloch). *Paru; Indian-fish; Flatfish.*

West Indies; south to Bahia.
Chætodon paru Bloch, Ichth., pl. 197, fig. 1, 1787, Brazil; on a drawing.

Subgenus POMACANTHODES Gill.

Pomacanthodes Gill, Proc. Ac. Nat. Sci. Phila. 1862, 244 (*zonipectus*).

2121. Pomacanthus zonipectus (Gill). *Mojarra de las Piedras.*

West coast of tropical America, from Mazatlan to Panama.
Pomacanthodes zonipectus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 244, San Salvador.

Genus 660. HOLACANTHUS Lacépède. *Catalinetas.*

Holacanthus Lacépède, Hist. Nat. Poiss., IV, 525, 1803 (*tricolor*).

2122. Holacanthus passer Valenciennes.

West coast of tropical America; Cape San Lucas to Galapagos Islands.
Holacanthus passer Valenciennes, Voyage Vénus, 327, pl. 6, 1846, Galapagos Archipelago.

2123. Holacanthus clarionensis Gilbert.

Clarion, Socorro, and San Benedicto islands of the Revillagigedo group.
Holacanthus clarionensis Gilbert, Proc. U. S. Nat. Mus. 1890, 72, Revillagigedo Islands; Clarion, Socorro, and San Benedicto.

2124. Holacanthus tricolor (Bloch). *Catalineta; Vaqueta de dos Colores; Rock Beauty.*

West Indies; north to Bermuda; south to Bahia.
Chætodon tricolor Bloch, Ichth., pl. 426, 1795.

Genus 661. ANGELICHTHYS Jordan & Evermann.

Angelichthys Jordan & Evermann, new genus (*ciliaris*).

2125. Angelichthys isabelita (Jordan & Rutter). *Angel-fish.*

West Indies; north to Key West, Florida.
Holacanthus isabelita Jordan & Rutter MS., Key West.

Chaelwdon

Woods Hall,

Tertius aliala [redacted]
Secundo sclarum 9.

2126. Angelichthys iodocus (Jordan & Rutter).
Galapagos Islands.
Holacanthus iodocus Jordan & Rutter, Proc. U. S. Nat. Mus. 1896, Galapagos Islands.

2127. Angelichthys ciliaris (Linnæus). *Angel-fish; Isabelita; Yellow Angel.*
West Indies north to Key West.
Chætodon ciliaris Linnæus, Syst. Nat., ed. x, 276, 1758, Indies; in part.

Family CLXVIII. ZANCLIDÆ. The Moorish Idols.

Genus 662. ZANCLUS Cuvier & Valenciennes.
Zanclus Cuvier & Valenciennes, Hist. Nat. Poiss., VII, 102, 1831 (*cornutus*).

2128. Zanclus cornutus (Linnæus). *Moorish Idol; Piquier; Porte-Enseigne; Besan.*
East Indies and islands of Polynesia, ranging east to the Revillagigedos.
Chætodon cornutus Linnæus, Syst. Nat., ed. x, 273, 1758, "Indies"; after Artedi.

Family CLXIX. TEUTHIIDIDÆ. The Surgeons.

Genus 663. TEUTHIS Linnæus. *Doctor-fishes.*
Teuthis Linnæus, Syst. Nat., ed. XII, 507, 1766 (*hepatus, jarus;* after *Hepatus* Gronow, same species).

2129. Teuthis triostegus (Linnæus).
Pacific Ocean, from New Zealand and Australia to the Hawaiian Islands and the Revillagigedos.
Chætodon triostegus Linnæus, Syst. Nat., ed. x, 274, 1758, India.

2130. Teuthis cœruleus (Bloch & Schneider). *Barbero; Blue Surgeon; Blue Tang.*
West Indies, Key West and Bermuda to Bahia.
Acanthurus cœruleus Bloch & Schneider, Syst. Ichth., 214, 1801, Carolina; Havana; Jamaica; after Catesby, Parra, and Browne.

2131. Teuthis hepatus Linnæus. *Common Surgeon; Doctor-fish; Lancet-fish; Barber; Tang-Barbero.*
West Indian fauna; Florida to Bahia; Key West and Cuba; Charleston, South Carolina.
Teuthis hepatus Linnæus, Syst. Nat., ed. XII, 507, 1766, Carolina.

2132. Teuthis crestonis Jordan & Starks. *Barbero Negro.*
West coast of Mexico and Central America, Mazatlan to Panama.
Teuthis crestonis Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 485, pl. 47, Mazatlan.

2133. Teuthis bahianus (Castelnau). *Barbeiro.*
West Indies and both coasts of tropical America, from Key West and Mazatlan to Bahia and Panama.
Acanthurus bahianus Castelnau, Anim. Nouv. ou Rares de l'Amér. du Sud, 24, pl. 2, fig. 1, 1855, Bahia.

Genus 664. XESURUS Jordan & Evermann.
Xesurus Jordan & Evermann, new genus (*punctatus*).

2134. Xesurus punctatus (Gill). *Cochinito.*
Cape San Lucas; Mazatlan; Creston Island.
Prionurus punctatus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 242, Cape San Lucas.

2135. Xesurus clarionis Gilbert & Starks.
Galapagos Islands.
Xesurus clarionis Gilbert & Starks, Proc. U. S. Nat. Mus. 1896, Clarion Island, Galapagos Archipelago.

2136. Xesurus laticlavius (Valenciennes).
Galapagos Islands; only the type known.
Prionurus laticlavius Valenciennes, Voyage Vénus, 335, pl. 7, fig. 2, 1846, Galapagos Islands.

Suborder SCLERODERMI.

Family CLXX. TRIACANTHIDÆ.

Genus 665. HOLLARDIA Poey.

Hollardia Poey, Memorias, II, 348, 1861 (*hollardi*).

2137. Hollardia hollardi Poey.

Hollardia hollardi Poey, Memorias, II, 348, pl. 18, fig. 11, 1861, Cuba.

Family CLXXI. BALISTIDÆ. The Trigger-Fishes.

Genus 666. BALISTES (Artedi) Linnæus.

Balistes (Artedi) Linnæus, Syst. Nat., ed. x, 327, 1758 (*vetula*).

Subgenus CAPRISCUS Rafinesque.

Capriscus Rafinesque, Indice, 41, 1810 (*capriscus*).

2138. Balistes polylepis Steindachner.

Lower California to Panama.

Balistes polylepis Steindachner, Ichth. Beitr., v, 21, 1876, Magdalena Bay; Mazatlan; Acapulco.

2139. Balistes naufragium Jordan & Starks. *Pez Puerco de las Piedras.*

Mazatlan.

Balistes naufragium Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 488, Mazatlan.

2140. Balistes carolinensis Gmelin. *Leather Jacket; "Turbot"; Cucuyo.*

Tropical parts of the Atlantic; Gulf Stream; Mediterranean.

Balistes carolinensis Gmelin, Syst. Nat., I, 1468, 1788, Carolina.

2141. Balistes forcipatus Gmelin.

West coast of Africa and the neighboring islands.

Balistes forcipatus Gmelin, Syst. Nat., I, 1472, 1788, Brazil; after *Guaperva lata* of Lister.

2142. Balistes powellii Cope.

Newport, Rhode Island; West Indies; in the Gulf Stream.

Balistes powellii Cope, Proc. Ac. Nat. Sci. Phila. 1870, 120, Newport, R. I.

Subgenus BALISTES (Artedi) Linnæus.

2143. Balistes vetula Linnæus. *Bessy Cerka.*

Tropical parts of the Atlantic; West Indies; Gulf Stream to Woods Hole.

Balistes vetula Linnæus, Syst. Nat., ed. x, 329, 1758, Ascension Island; after *Balistes vetula* of Osbeck, Iter Chinensis, 294, 1757.

Genus 667. PACHYNATHUS Swainson.

Pachynathus Swainson, Classn. Fishes, II, 326, 1839 (*triangularis* = *capistratus*); not *Pachygnatha* nor *Pachygnathus*; both these names earlier used for genera of spiders.

2144. Pachynathus capistratus (Shaw). *Pez Puerco.*

Pacific Ocean; East Indies; China; Pacific Coast of tropical America, from Magdalena Bay to the Galapagos.

Balistes capistratus Shaw, Genl. Zool., v, 417, 1804, after Lacépède.

Genus 668. CANTHIDERMIS Swainson. *Sobacos.*

Canthidermis Swainson, Nat. Hist. Classn. Anim., II, 325, 1839 (*angulosus* = *maculatus*).

2145. Canthidermis sobaco (Poey). *Sobaco.*

West Indies.

Balistes sobaco Poey, Memorias, II, 324, 1861, Havana.

2146. Canthidermis asperrimus (Cope).

St. Martins, West Indies.

Balistes asperrimus Cope, Trans. Amer. Philos. Soc. 1871, 478, supposed to be from St. Martins.

Cantherines ~~Classmates~~ Carolae.

Rhullaggetos Ds. is what? [illegible]

2147. Canthidermis sufflamen (Mitchill). *Sobaco.*
West Indies; Havana.
Balistes sufflamen Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, locality unknown, said by DeKay to be from the South Atlantic.

2148. Canthidermis maculatus (Bloch).
West Indies.
Balistes maculatus Bloch, Ichthyologia, pl. 151, 1786, West Indies.

2149. Canthidermis willughbeii (Lay & Bennett).
East Indies and Pacific Coast of Mexico.
Balistes willughbeii Lay & Bennett, Zoology, Beechey's Voyage, 68, pl. 21, fig. 2, 1839, Acapulco, Mexico.

Genus 669. XANTHICHTHYS Kaup.
Xanthichthys Kaup, in Richardson, Enc. Brit., ed. XII, 313, 1856 (*curassavicus*).

2150. Xanthichthys ringens (Linnæus). *Cocuyo.*
West Indies and southward, recorded from Mauritius.
Balistes ringens Linnæus, Syst. Nat., ed. X, 329, 1758, no locality.

2151. Xanthichthys mento (Jordan & Gilbert).
West coast of Mexico.
Balistes mento Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 228, Clarion Island, of the Revillagigedo group.

Genus 670. MELICHTHYS Swainson.
Melichthys Swainson, Class. An., II, 325, 1839 (*ringens* Bloch, not of Linnæus).

2152. Melichthys piceus (Poey). *Galafate; Calafate.*
West Indies and southward.
Balistes piceus Poey, Proc. Ac. Nat. Sci. Phila. 1863, 180, Cuba.

2153. Melichthys bispinosus Gilbert.
Clarion and Socorro islands.
Melichthys bispinosus Gilbert, Proc. U. S. Nat. Mus. 1890, 125, Clarion and Socorro islands, of the Revillagigedo group.

Family CLXXII. MONACANTHIDÆ. The File-Fishes.

Genus 671. CANTHERINES Swainson.
Cantherines Swainson, Classn. Fishes, II, 327, 1839 (*nasutus*=*sanwichensis*).

2154. Cantherines pullus (Ranzani). *Lija Colorada.*
West Indies and coast of Brazil; southern Florida.
Monacanthus pullus Ranzani, Nov. Comm. Act. Sci. Inst. Bonon., V, 4, pl. 1, 1842, Brazil. Cantherines (Ps. amphiosus Cope

Genus 672. MONACANTHUS Cuvier.
Monacanthus Cuvier, Règne Animal, ed. I, 152, 1817 (*chinensis*).

2155. Monacanthus ciliatus (Mitchill). *Leather-fish; Lija; Flap-mingo.*
West Indies and Florida; Florida Keys.
Balistes ciliatus Mitchill, Amer. Monthly Mag. & Crit. Rev., March, 1818, 326, Bahama Straits.

2156. Monacanthus hispidus (Linnæus). *Fool-fish; File-fish; Leather-fish; Lija; Mingo.*
Cape Cod to Cuba; South Atlantic Coast and Florida Keys; West Indies to Brazil.
Balistes hispidus Linnæus, Syst. Nat., ed. XII, 405, 1766, Carolina.

2157. Monacanthus spilonotus Cope.
Gulf of Mexico.
Monacanthus spilonotus Cope, Trans. Amer. Philos. Soc. Phila., XIV, 1870, 476.

2158. Monacanthus oppositus Poey.
Cuba.
Monacanthus oppositus Poey, Memorias, II, 331, 1861, Havana.

Genus 673. PSEUDOMONACANTHUS Bleeker.
Pseudomonacanthus Bleeker, Nederl. Tyd. Dierkunde, III, 1866, 11 (*macrurus*).

2159. Pseudomonacanthus amphioxys (Cope).
St. Martins Island, West Indies.
Monacanthus amphioxys Cope. Trans. Amer. Philos. Soc. 1871, 477, St. Martins.

Genus 674. ALUTERA Cuvier.
Les alutères Cuvier, Règne Animal, ed. 1, II, 153, 1817 (*monoceros*).

Subgenus CERATACANTHUS Gill.
Ceratacanthus Gill, Cat. Fishes East Coast U. S., 57, 1861 (*aurantiacus*).

2160. Alutera schoepfii (Walbaum). *File-fish; Lija; Fool-fish.*
Cape Cod to the Carolinas and Florida.
Balistes schoepfii Walbaum, Artedi Piscium, 461, 1792, Long Island; after Schöpf, Berlin. Ges. Naturf., VIII, 186, 1788.

2161. Alutera punctata Agassiz. *Long Mingo.*
Jamaica to Bahia.
Alutera punctata Agassiz, Pisc. Brasil., 437, pl. 72, 1829, Brazil.

Subgenus OSBECKIA Jordan & Evermann.
Osbeckia Jordan & Evermann, new subgenus (*scripta*).

2162. Alutera scripta (Osbeck). *Unicorn-fish; Lija Trompa.*
Tropical seas; West Indies; North Carolina; off west coast of Mexico; Clarion Island, Revillagigedo Islands.
Balistes scriptus Osbeck, Iter Chinensis, I, 144, 1757, China.

Subgenus ALUTERA Cuvier.

2163. Alutera monoceros (Osbeck). *Lija Barbuda.*
West Indies; East Indies; Japan.
Balistes monoceros Osbeck, Iter Chinensis, 110, 1757, Asia.

Suborder OSTRACODERMI. The Trunk-Fishes.

Family CLXXIII. OSTRACIIDÆ.

Genus 675. LACTOPHRYS Swainson. *Three-angled Trunk-fishes.*
Lactophrys Swainson, Nat. Hist. Classn. Fishes, II, 194, 324, 1839 (*trigonus*, etc.).

Subgenus RHINESOMUS Swainson.
Rhinesomus Swainson, Nat. Hist. Classn. Fishes, II, 194, 324, 1839 (*triqueter*).

2164. Lactophrys triqueter (Linnæus). *Trunk-fish; Rock Shellfish; Drunken-fish; Chapin; Plate-fish.*
West Indies, north to the Bermudas; Key West and Pensacola.
Ostracion triqueter Linnæus, Syst. Nat., ed. X, 330, 1758, India.

Subgenus CHAPINUS Jordan & Evermann.
Chapinus Jordan & Evermann, new subgenus (*bicaudalis*).

2165. Lactophrys bicaudalis (Linnæus). *Chapin; Spotted Trunk-fish.*
West Indies, from Cuba to Ascension Island.
Ostracion bicaudalis Linnæus, Syst. Nat., ed. X, 330, 1758, India; after Artedi.

Subgenus LACTOPHRYS Swainson.

2166. Lactophrys trigonus (Linnæus). *Common Trunk-fish; Chapin; Shell-fish.*
West Indies, north to Bermuda and Key West; occasionally northward in Gulf Stream to Holmes Hole, Massachusetts, and Chesapeake Bay.
Ostracion trigonus Linnæus, Syst. Nat., ed. X, 330, 1758, India.

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Subgenus ACANTHOSTRACION Bleeker.

Acanthostracion Bleeker, Atlas Ichth., v, 27, 1865 (*quadricornis*).

2167. Lactophrys tricornis (Linnæus). *Cuckold; Toro; Cowfish.*

Tropical parts of Atlantic, from Carolina to Brazil, ranging north in the Gulf Stream to Charleston and Chesapeake Bay; Gulf of Mexico, at Pensacola and Galveston, eastward to Guinea and Cape of Good Hope.

Ostracion tricornis Linnæus, Syst. Nat., ed. x, 331, 1758, "In India"; after Artedi.

Suborder GYMNODONTES.

Family CLXXIV. TETRAODONTIDÆ. The Puffers.

Genus 676. LAGOCEPHALUS Swainson. CRAYRACION Jenne 1777

Lagocephalus Swainson, Nat. Hist. and Classn. Fishes, II, 194, 328, 1839 (*pennanti*=*lagocephalus*). type Lagocephalus

2168. Lagocephalus lævigatus (Linnæus). *Smooth Puffer.*

Cape Cod to Brazil; rare north of Cape Hatteras.

Tetrodon lævigatus Linnæus, Syst. Nat., ed. XII, 411, 1766, Charleston, South Carolina.

2169. Lagocephalus pachycephalus (Ranzani). *Jugfish.*

Jamaica to Brazil.

Tetrodon pachycephalus Ranzani, Nov. Comm. Ac. Sci. Inst. Bonon., IV, 1840, 73, pl. 2, fig. 2, Brazil.

Genus 677. SPHEROIDES Lacépède. *Swellfishes.* TETRAODON.

Les spheroides Lacépède, Hist. Nat. Poiss., II, 1, 1798 (French name only, *tubercule*). (type T. testudineus)

Subgenus SPHEROIDES Lacépède.

2170. Spheroides angusticeps (Jenyns).

Pacific Coast, La Paz to the Galapagos Islands.

Tetrodon angusticeps Jenyns, Voyage Beagle, Fishes, 154, 28, 1842, Galapagos Islands.

2171. Spheroides lobatus (Steindachner). *Botete.*

Gulf of California to the Galapagos Islands; Mazatlan; Panama.

Canthogaster? lobatus Steindachner, Ichth. Notizen, x, 1875, 18, pl. 5, fig. 3, Altata.

2172. Spheroides spengleri (Bloch). *Southern Puffer; Swell Toad; Tambor.*

West Indies; coast of Texas and Florida, south to Rio Janeiro and to the Madeiras and Canaries.

Tetrodon spengleri Bloch, Ichth., I, 135, pl. 144, 1782, East Indies.

2173. Spheroides marmoratus (Ranzani). *Spiny-back Blowfish.*

West Indies to Brazil; Jamaica.

Tetrodon marmoratus Ranzani, Nov. Comm. Ac. Sci. Inst. Bonon., IV, 1840, 72, pl. 10, fig. 1, Brazil.

2174. Spheroides maculatus (Bloch & Schneider). *Puffer; Swell Toad; Blower.*

Atlantic Coast of the United States, from Cape Ann to St. Johns River and Biscayne Bay, Florida.

Tetrodon hispidus var. *maculatus* Bloch & Schneider, Syst. Ichth., 504, 1801, Rhode Island; after Schöpf.

Subgenus CHEILICHTHYS Müller.

Cheilichthys Müller, Abhandl. Akad. Wiss. Berl., 252, 1839 (1841) (*testudineus*).

2175. Spheroides testudineus (Linnæus). *Tambor; Globefish; Blowfish.*

West Indies; Gulf Stream as far as Newport, Rhode Island.

Tetraodon testudineus Linnæus, Syst. Nat., ed. x, 332, 1758, in India; based on Balk and Artedi.

2176. Spheroides annulatus (Jenyns).

Pacific Coast of tropical America.

Tetrodon annulatus Jenyns, Zool. Beagle, 153, 1842, Galapagos Islands.

2176a. Spheroides annulatus politus (Girard).
Pacific Coast of tropical America, San Diego to Mazatlan.
Tetrodon politus Girard, Pac. R. R. Surv., x, 340, 1858, San Diego, California.

2177. Spheroides formosus (Günther).
Panama.
Tetrodon formosus Günther, Cat., VIII, 283, 1870, South America.

2178. Spheroides furthii (Steindachner).
Panama.
Tetrodon furthii Steindachner, Ichth. Beitr., v, 22, 1874, Panama.

2179. Spheroides trichocephalus (Cope).
Gulf Stream, off Newport.
Tetrodon trichocephalus Cope, Proc. Ac. Nat. Sci. Phila. 1870, 120, Gulf Stream, off Newport, Rhode Island.

2180. Spheroides pachygaster (Müller & Troschel).
Barbados.
Tetrodon (Cheilichthys) pachygaster Müller & Troschel, in Schomburgk's Hist. Barbados, 677, 1840, Barbados.

Genus 678. OVOIDES Lacépède.
Les ovoides Lacépède, Hist. Nat. Poiss., I, 256, 1797 (*fasce;* French name only; based on front view of *Tetraodon stellatus*).

2181. Ovoides erethizon (Jordan & Gilbert).
Panama and neighboring islands.
Arothron erethizon Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 631, Panama.

2182. Ovoides setosus (Rosa Smith).
West coast of Mexico; Revillagigedo Islands; Gulf of California.
Tetraodon setosus Rosa Smith, Bull. Cal. Ac. Sci., II, November 13, 1886, 6, "Mexico."

Genus 679. COLOMESUS Gill.
Colomesus Gill, Proc. U. S. Nat. Mus. 1884, 422 (*psittacus*).

2183. Colomesus psittacus (Bloch & Schneider).
River mouths, Guiana and northern Brazil; Rio Branco, Essequibo, Marañon, and Capim at Para; "West Indies."
Tetrodon psittacus Bloch & Schneider, Syst. Ichth., 505, 1801, "Malabar."

Family CLXXV. CANTHIGASTERIDÆ. The Sharp-nosed Puffers.

Genus 680. CANTHIGASTER Swainson.
Canthigaster Swainson, Nat. Hist. Fishes, II, 194, 1839 (diagnosis only; no species mentioned; *rostratus* intended).

2184. Canthigaster punctatissimus (Günther).
Pacific Coast of America, Gulf of California to Panama.
Tetrodon punctatissimus Günther, Cat., VIII, 302, 1870, Panama.

2185. Canthigaster rostratus (Bloch).
West Indian fauna; Pensacola; Madeiras and Bermudas.
Tetrodon rostratus Bloch, Ichth., I, pl. 146, 1782, India.

Family CLXXVI. DIODONTIDÆ. The Porcupine-Fishes.

Genus 681. TRICHODIODON Bleeker.
Trichodiodon Bleeker, Atlas Ichth., Gymnodontes, 49, 1867 (*pilosus*).

2186. Trichodiodon pilosus (Mitchill).
New York.
Diodon pilosus Mitchill, Trans. Lit. Philos. Soc. N. Y., I, 1815, 471, supposed to be from New York Harbor.

Everman Spendell
Key West.

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Chilomycterus antillarum Jordan
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Paradiodon Fleeber. (not allowable)

Genus 682. DIODON Linnæus. *Porcupine-fishes.*
Diodon Linnæus, Syst. Nat., ed. x, 335, 1758 (*hystrix*).

2187. Diodon hystrix Linnæus. *Porcupine-fish; Erizo; Puerco Espino; Soursap.*
Tropical seas, north to Lower California, Hawaiian Islands and to Florida.
Diodon hystrix Linnæus, Syst. Nat., ed. x, 335, 1758, India; after Artedi.

2188. Diodon holacanthus Linnæus.
All warm seas; north to Florida Keys; Lower California and Hawaiian Islands.
Diodon holacanthus Linnæus, Syst. Nat., ed. x, 335, 1758, India; based on Artedi.

2189. Diodon maculifer Kaup.
Cape of Good Hope; Cuba ?.
Diodon maculifer Kaup, Wiegmann's Arch., 229, 1855, Cape of Good Hope.

Genus 683. CHILOMYCTERUS Bibron. *Burrfishes.*
Chilomycterus Bibron, in Barnville, Revue Zoologique, 40, 1846 (*reticulatus* = *tigrinus*).

Subgenus CYCLICHTHYS Kaup.
Cyclichthys Kaup, Wiegm. Archiv, 231, 1855 (*orbicularis*).

2190. Chilomycterus schœpfi (Walbaum). *Common Burrfish; Rabbit-fish; Swell Toad.*
Cape Cod to the West Indies.
Diodon schœpfi Walbaum, Artedi Pisc., 601, 1792, Long Island; after Schöpf.

2191. Chilomycterus spinosus (Linnæus).
West Indies and coast of Brazil.
Diodon spinosus Linnæus, Syst. Nat., ed. x, 335, 1758, India.

2192. Chilomycterus antennatus (Cuvier).
West Indies and southward; St. Croix; Jamaica; Porto Rico; Cape of Good Hope.
Diodon antennatus Cuvier, Mém. Mus., IV, 131, pl. 7, 1818.

Subgenus CHILOMYCTERUS Bibron.

2193. Chilomycterus atinga (Linnæus). *Atinga.*
West Indies to Bermuda and Florida Keys.
Diodon atinga (misprinted *atringa*) Linnæus, Syst. Nat., ed. x, 334, 1758, India.

2194. Chilomycterus californiensis Eigenmann.
San Pedro, California.
Chilomycterus californiensis Eigenmann, Am. Nat., 1891, 1133, San Pedro, California.

Family CLXXVII. MOLIDÆ. The Headfishes.

Genus 684. MOLA Cuvier. *Headfishes.*
Mola Cuvier, Tableau Élém. Hist. Nat. Animaux, 323, 1798 (*rotunda* = *mola*).

2195. Mola mola (Linnæus). *Sunfish; Headfish; Mola; Pez Luna.*
Temperate and tropical seas, northward to England, Cape Cod, and San Francisco; rare in the West Indies.
Tetrodon mola Linnæus, Syst. Nat., ed. x, 334, 412, 1758, Mediterranean.

Genus 685. RANZANIA Nardo. *King of the Mackerels.*
Ranzania Nardo, Ann. Sci. Regn. Lombard. Venet., x, 1840, 105 (*truncatus*).

2196. Ranzania truncata (Retzius).
Pelagic; occasionally on Atlantic Coast; Bermudas.
Tetrodon truncat[illegible] Vet. Ak. Nya. Handl., VI, 2, 118, 1785.

Suborder LORICATI.

Family CLXXVIII. SCORPÆNIDÆ. The Rockfishes.

Genus 686. SEBASTES Cuvier. *Rosefishes.*

Sebastes Cuvier, Règne Animal, ed. 2, II, 166, 1829 (*norvegicus* = *marinus*).

2197. Sebastes marinus (Linnæus). *Rosefish; Redfish; Snapper; Hemdurgan.*

North Atlantic, both coasts, south to Faroe Islands, Maine, and in deep water off coast of middle New Jersey.

Perca marina Linnæus, Syst. Nat., ed. X, I, 290, 1758, Norway.

Genus 687. SEBASTOLOBUS Gill.

Sebastolobus Gill, Rept. Smithson. Inst. 1880 (1881), 375 (*macrochir*).

2198. Sebastolobus alascanus Bean.

Bering Sea; Pacific Coast of Alaska, Washington, Oregon, and California.

Sebastolobus alascanus Bean, Proc. U. S. Nat. Mus. 1890, 44, off Trinity Islands, Alaska, at Albatross Station 2853, 56° N., 154° W., in 159 fathoms.

2199. Sebastolobus altivelis Gilbert.

Aleutian Islands, Alaska, and in deep water off the coast of California.

Sebastolobus altivelis Gilbert, Rept. U. S. F. C. 1893 (1896), 410, pl. 23, south of Alaska Peninsula, at Albatross Station 3338, in 625 fathoms.

Genus 688. SEBASTODES Gill. *Rockfishes.*

Sebastodes Gill, Proc. Ac. Nat. Sci. Phila. 1861, 165 (*paucispinis*).

Subgenus SEBASTODES Gill.

2200. Sebastodes jordani Gilbert.

Coast of California in deep water.

Sebastodes jordani Gilbert, Rept. U. S. F. C. 1893 (1896), 466, coast of California, at Albatross Stations 2935, 3103, and 3114, in 64 to 124 fathoms.

2201. Sebastodes goodei Eigenmann & Eigenmann.

San Diego to San Francisco.

Sebastodes goodei Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1890, 12, San Diego, California.

2202. Sebastodes paucispinis (Ayres). *Boccaccio; Merou; Jack.*

San Diego to San Francisco.

Sebastes paucispinis Ayres, Proc. Cal. Ac. Nat. Sci., I, 1854, 6, San Francisco.

Subgenus SEBASTOSOMUS Gill.

Sebastosomus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 147 (*melanops*).

2203. Sebastodes flavidus (Ayres). *Yellow-tail Rockfish.*

San Diego to San Francisco.

Sebastodes flavidus Ayres, Proc. Cal. Ac. Sci. 1862, 209, fig. 64, San Francisco.

2204. Sebastodes serranoides Eigenmann & Eigenmann.

Cortez Banks, off San Diego.

Sebastodes serranoides Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1890, 36, Cortez Banks.

2205. Sebastodes melanops (Girard).

Pacific Coast of America, from Monterey to Sitka.

Sebastes melanops Girard, Proc. Ac. Nat. Sci. Phila., VIII, 1856, 135, Astoria, Oregon.

Subgenus PRIMOSPINA Eigenmann & Beeson.

Primospina Eigenmann & Beeson, Am. Nat. 1893, 669 (*mystinus*).

2206. Sebastodes ciliatus (Tilesius).

Coast of Alaska.

Epinephelus ciliatus Tilesius, Mém. Ac. Sci. St. Petersb., IV, 1810, 474, Aleutian Islands.

2207. Sebastodes mystinus Jordan & Gilbert. *Black Rockfish; Pêche Prêtre; Priest-fish.*
Pacific Coast of America, from Puget Sound to San Diego.
Sebastichthys mystinus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880 (1881), 455, San Francisco.

Subgenus ACUTOMENTUM Eigenmann & Beeson.
Acutomentum Eigenmann & Beeson, Am. Nat. 1893, 669 (*ovalis*).

2208. Sebastodes entomelas (Jordan & Gilbert).
Pacific Coast of America, from Port Harford to Monterey Bay.
Sebastichthys entomelas Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 142, Monterey.

2209. Sebastodes rufus Eigenmann & Eigenmann.
Pacific Coast of America, near San Diego; Cortez Banks.
Sebastodes rufus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1890, 13, Point Loma; Cortez Banks.

2210. Sebastodes macdonaldi (Eigenmann & Beeson).
San Diego, California.
Acutomentum macdonaldi Eigenmann & Beeson, Am. Nat. 1893, 669, San Diego, California.

2211. Sebastodes brevispinis (Bean).
Coast of Alaska.
Sebastichthys proriger var. *brevispinis* Bean, Proc. U. S. Nat. Mus. 1883, 359, Hassler Harbor, Alaska.

2212. Sebastodes ovalis (Ayres). *Viura; Widow-fish.*
Pacific Coast of United States from San Diego to San Francisco.
Sebastodes ovalis Ayres, Proc. Cal. Ac. Sci. 1862, 209–212, fig. 65, San Francisco.

2213. Sebastodes eigenmanni Cramer.
Coast of California.
Sebastodes eigenmanni Cramer, Proc. Cal. Ac. Sci. 1896, 239, Monterey, California.

2214. Sebastodes hopkinsi Cramer.
Monterey Bay, California.
Sebastodes hopkinsi Cramer, Proc. Cal. Ac. Sci. 1895, with plate, Monterey Bay, California.

2215. Sebastodes alutus (Gilbert).
Pacific Coast of America, from Bering Sea to Santa Barbara.
Sebastichthys alutus Gilbert, Proc. U. S. Nat. Mus. 1890, 76, Santa Barbara Islands, California.

2216. Sebastodes proriger (Jordan & Gilbert).
San Diego to San Francisco.
Sebastichthys proriger Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 327, Monterey, California.

ROSICOLA Jordan & Evermann.
Rosicola Jordan & Evermann, new subgenus (*pinniger*).

2217. Sebastodes pinniger (Gill). *Orange Rockfish.*
Pacific Coast of America, from San Diego to Puget Sound.
Sebastosomus pinniger Gill, Proc. Ac. Nat. Sci. Phila. 1864, 147, San Francisco.

2218. Sebastodes miniatus (Jordan & Gilbert). *Rasciera; Rasher.*
Pacific Coast of America, from San Francisco to San Diego.
Sebastichthys miniatus Jordan & Gilbert, Proc. U. S. N. M. 1880, 70, Monterey, California.

2219. Sebastodes atrorubens Gilbert.
Monterey, California.
Sebastodes atrorubens Gilbert, Proc. Cal. Ac. Sci. 1896, Monterey, California.

2220. Sebastodes atrovirens (Jordan & Gilbert).

Coast of California, from San Diego to San Francisco.

Sebastichthys atrovirens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 289, Monterey, California.

Subgenus EOSEBASTES Jordan & Evermann.

Eosebastes Jordan & Evermann, new subgenus (*aurora*).

2221. Sebastodes saxicola (Gilbert).

Southern California, Santa Barbara Islands.

Sebastichthys saxicola Gilbert, Proc. U. S. Nat. Mus. 1890, 78, Santa Barbara Islands at Albatross Stations 2893, 2907, and others, in 44 to 155 fathoms.

2222. Sebastodes crameri Jordan.

Coast of Oregon.

Sebastodes crameri Jordan, Proc. U. S. Nat. Mus. 1896, coast of Oregon, at Albatross Station 3091.

2223. Sebastodes semicinctus Gilbert.

Coast of California.

Sebastodes semicinctus Gilbert, Proc. U. S. Nat. Mus. 1896, Santa Barbara Channel, California.

2224. Sebastodes diploproa (Gilbert).

Coast of southern California at Coronado Islands.

Sebastichthys diploproa Gilbert, Proc. U. S. Nat. Mus. 1890, 79, Coronado Islands at Albatross Station 2935, in 124 fathoms.

2225. Sebastodes aurora (Gilbert).

Coast of California about the Santa Barbara Islands.

Sebastichthys aurora Gilbert, Proc. U. S. Nat. Mus. 1890, 80, Santa Barbara Islands at Albatross Stations 2948 and 2960, in 266 and 267 fathoms.

2226. Sebastodes melanostomus Eigenmann & Eigenmann.

Coast of California to Alaska.

Sebastodes melanostomus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. (2), III, 1890, 17, Point Loma, near San Diego, California.

Subgenus SEBASTOMUS Gill.

Sebastomus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 147 (*rosaceus*).

2227. Sebastodes ruberrimus Cramer. *Red Rockfish; Tambor.*

Pacific Coast of America, from San Diego to Puget Sound.

Sebastodes ruberrimus Cramer, Proc. Cal. Ac. Sci. 1895, 597, pls. 62, 63, and 69, Monterey, California.

2228. Sebastodes constellatus (Jordan & Gilbert). *Spotted Rockfish.*

Coast of California, from San Diego to San Francisco.

Sebastichthys constellatus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 295, Santa Barbara Channel; San Francisco.

2229. Sebastodes umbrosus (Jordan & Gilbert).

Coast of California, Point Conception to Coronado Islands.

Sebastichthys umbrosus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 410, Santa Barbara.

2230. Sebastodes rosaceus (Girard). *Corsair.*

Pacific Coast of United States, from San Diego to San Francisco.

Sebastes rosaceus Girard, Proc. Ac. Nat. Sci. Phila., VIII, 1854, 146, San Diego, San Francisco.

2231. Sebastodes ayresii Gilbert & Cramer.

Coast of southern California at Cortez Banks, near San Diego.

Sebastodes ayresii Gilbert & Cramer, Proc. U. S. Nat. Mus. 1896, Cortez Banks, near San Diego, California.

Sebastodes aleutianus Jordan & Gilbert.

Sebastodes dearie.
clavidatus
emphaeus } Puget Sound
Starks.
Ann Carnegie Mus
1916.

2232. Sebastodes rhodochloris (Jordan & Gilbert). *Flyfish.*

Off Monterey and San Francisco.

Sebastichthys rhodochloris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 144, Monterey.

2233. Sebastodes eos Eigenmann & Eigenmann.

Coast of California at Point Loma, near San Diego.

Sebastodes eos Eigenmann & Eigenmann, Proc. Cal. Ac. Sci., 18, 1890, Point Loma, near San Diego, California.

2234. Sebastodes gillii Eigenmann & Eigenmann.

Coast of California at Point Loma, near San Diego.

Sebastodes gillii Eigenmann & Eigenmann, Am. Nat., February, 1891, 154, Point Loma, near San Diego, California.

2235. Sebastodes chlorostictus (Jordan & Gilbert). *Pesca Vermiglia.*

San Diego; Monterey; San Francisco.

Sebastichthys chlorostictus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 294, Monterey, California.

2236. Sebastodes rupestris (Gilbert).

Coast of California about the Santa Barbara Islands.

Sebastichthys rupestris Gilbert, Proc. U. S. Nat. Mus. 1890, 76, Santa Barbara Islands, at Albatross Station 2946, in 150 fathoms.

Subgenus HISPANISCUS Jordan & Evermann.

Hispaniscus Jordan & Evermann, new subgenus (*rubrivinctus*).

2237. Sebastodes sinensis (Gilbert).

Gulf of California.

Sebastichthys sinensis Gilbert, Proc. U. S. Nat. Mus. 1890, 81, Gulf of California, at Albatross Station 3015, in 145 fathoms.

2238. Sebastodes zacentrus (Gilbert).

Coast of California.

Sebastichthys zacentrus Gilbert, Proc. U. S. Nat. Mus. 1890, 77, Santa Barbara Islands, at Albatross Stations 2893 and 2946, in 145 and 150 fathoms.

2239. Sebastodes elongatus (Ayres). *Reina.*

California coast, from San Diego to San Francisco.

Sebastes elongatus Ayres, Proc. Cal. Ac. Sci., II, 1859, 26, fig. 9, San Francisco.

2240. Sebastodes levis (Eigenmann & Eigenmann).

Coast of California, from San Diego to Monterey.

Sebastichthys levis Eigenmann & Eigenmann, Notes from the San Diego Biol. Lab., I, 6, 1889, San Diego, California.

2241. Sebastodes rubrivinctus (Jordan & Gilbert). *Spanish Flag.*

California coast, from San Diego to Monterey.

Sebastichthys rubrivinctus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 291, Santa Barbara Channel.

Subgenus AUCTOSPINA Eigenmann & Beeson.

Auctospina Eigenmann & Beeson, Am. Nat. 1893, 670 (*auriculatus*).

2242. Sebastodes auriculatus (Girard). *Brown Rockfish.*

Pacific Coast of America, from Cape Mendocino to Cerros Island.

Sebastes auriculatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 131, 146, San Francisco.

2242a. Sebastodes auriculatus dallii (Eigenmann & Beeson).

Pacific Coast of America, from San Francisco to Puget Sound.

Pteropodus dallii Eigenmann & Beeson, Amer. Nat., January, 1894, 66, San Francisco.

Subgenus PTEROPODUS Eigenmann & Beeson.

Pteropodus Eigenmann & Beeson, Am. Nat. 1893, 670 (*maliger*).

2243. Sebastodes rastrelliger (Jordan & Gilbert). *Grass Rockfish.*

California coast, from San Diego to San Francisco.

Sebastichthys rastrelliger Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 296, Monterey.

2244. Sebastodes caurinus (Richardson).

Pacific Coast of America, from Puget Sound to Sitka.

Sebastes caurinus Richardson, Voy. Sulphur, Ichthyology, 77, pl. 41, fig. 1, 1845, Sitka.

2245. Sebastodes vexillaris (Jordan & Gilbert).

California coast, from San Diego to Mendocino.

Sebastichthys vexillaris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 292, Santa Barbara Channel; San Francisco.

2246. Sebastodes maliger (Jordan & Gilbert). *Yellow-backed Rockfish.*

Pacific Coast of America, from Monterey to Sitka.

Sebastichthys maliger Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 322, San Francisco.

2247. Sebastodes gilberti Cramer.

Coast of California.

Sebastodes gilberti Cramer, Proc. Cal. Ac. Sci. 1896, 241, with plate, San Francisco.

2248. Sebastodes carnatus (Jordan & Gilbert). *Flesh-colored Rockfish.*

California coast, from San Diego to San Francisco.

Sebastichthys carnatus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 73, Monterey, California.

2249. Sebastodes chrysomelas (Jordan & Gilbert). *Black-and-yellow Rockfish.*

Pacific Coast of America, from Puget Sound to San Diego.

Sebastichthys chrysomelas Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 455, 465, Monterey, California.

2250. Sebastodes nebulosus (Ayres). *Yellow-spotted Rockfish.*

Pacific Coast, Vancouver Island to Point Conception.

Sebastes nebulosus Ayres, Proc. Cal. Ac. Sci. I, 1854, 5, San Francisco.

Subgenus SEBASTICHTHYS Gill.

Sebastichthys Gill, Proc. Ac. Nat. Sci. Phila. 1862, 329 (*nigrocinctus*).

2251. Sebastodes serriceps (Jordan & Gilbert). *Treefish.*

Coast of California, from Point Reyes to Cerros Island.

Sebastichthys serriceps Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 38, Santa Barbara and Santa Catalina islands, California.

2252. Sebastodes nigrocinctus (Ayres). *Black-banded Rockfish.*

Pacific Coast of America, from Monterey to Vancouver Island.

Sebastes nigrocinctus Ayres, Proc. Cal. Ac. Sci. II, 1859, 25, 217, fig. 6, San Francisco.

Genus 689. SEBASTOPSIS Gill.

Sebastopsis Gill, Proc. Ac. Nat. Sci. Phila. 1862, 278 (*polylepis*).

2253. Sebastopsis xyris Jordan & Gilbert.

West coast of Mexico.

Sebastopsis xyris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 369, Cape San Lucas, Lower California.

Genus 690. HELICOLENUS Goode & Bean.

Helicolenus Goode & Bean, Oceanic Ichthyology, 248, 1896 (*dactylopterus*).

2254. Helicolenus dactylopterus (De la Roche). *Seran Imperial; Fanegal; Cardonniera; Scorfanudi; Funal; Crabra.*

Deep waters of Atlantic Coast from Narragansett to Chesapeake Bay.

Scorpæna dactyloptera De la Roche, Ann. Mus., XIII, 1809, pl. 22, fig. 2, Ivica, Barcelona.

2255. Helicolenus maderensis Goode & Bean. *Boca Negra; Pai de Gato.*

Eastern coast of United States, from New York to Cape Hatteras.

Helicolenus maderensis Goode & Bean, Oceanic Ichth., 250, 1896, Madeira.

Sebastides Glaucus Holgendorf
Sebastides Caeganowskii Steindachner

Genus 691. SCORPÆNA (Artedi) Linnæus.

Scorpæna Artedi, in Linnæus, Syst. Nat., ed. x, 266, 1758 (*porcus*).

2256. Scorpæna agassizii Goode & Bean.

Mid-ocean east of Cuba.

Scorpæna agassizii Goode & Bean, Oceanic Ichth., 247, fig. 243, 1896, latitude 32° 13′ N., longitude 39° 10′ W.

2257. Scorpæna cristulata Goode & Bean.

Atlantic Ocean, off coast of Georgia.

Scorpæna cristulata Goode & Bean, Oce. Ichth., 247, fig. 242, 1896, off Georgia.

2258. Scorpæna brasiliensis Cuvier & Valenciennes.

Atlantic Coast, from Charleston to Rio Janeiro.

Scorpæna brasiliensis Cuvier & Valenciennes, Hist. Nat. Poiss., iv, 305, 1829, Brazil.

2259. Scorpæna histrio Jenyns.

Pacific Coast of America, Panama to Juan Fernandez; Galapagos Islands.

Scorpæna histrio Jenyns, Voyage Beagle, Fishes, 35, pl. 8, 1842, Chatham Island, Galapagos Archipelago.

2260. Scorpæna pannosa Cramer.

Panama.

Scorpæna pannosa Cramer, Proc. U. S. Nat. Mus., 1896, with plate, Panama.

2261. Scorpæna guttata Girard. *Scorpene; Scorpion; Sculpin.*

Coast of California, from Monterey to Ascension Island.

Scorpæna guttata Girard, Proc. Ac. Nat. Sci. Phila. 1854, 145, Monterey.

2262. Scorpæna plumieri Bloch. *Rascacio; Poison Grouper.*

West Indies and Brazil, north to Florida.

Scorpæna plumieri Bloch, Nya. Handl. Stockh., x, 234, 1789, Martinique.

2263. Scorpæna mystes Jordan & Starks. *Lapon.*

Coast of Mexico.

Scorpæna mystes Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 491, pl. 52, Mazatlan, Mexico.

2264. Scorpæna grandicornis Cuvier & Valenciennes. *Lion-fish; Poison Grouper.*

Florida Keys to Brazil.

Scorpæna grandicornis Cuvier & Valenciennes, Hist. Nat. Poiss., iv, 309, 1829, Martinique, Porto Rico, Havana, San Domingo.

2265. Scorpæna russula Jordan & Bollman.

Pacific Coast of Colombia.

Scorpæna russula Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 165, Pacific Coast of Colombia.

2266. Scorpæna sonoræ Jenkins & Evermann.

Guaymas, Gulf of California, and Santa Margarita Island.

Scorpæna sonoræ Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 150, Guaymas, Sonora.

2267 Scorpæna inermis Cuvier & Valenciennes.

West Indies, north to Florida.

Scorpæna inermis Cuvier & Valenciennes, Hist. Nat. Poiss., iv, 311, 1829, Martinique.

Genus 692. PONTINUS Poey.

Pontinus Poey, Memorias, ii, 172, 1860 (*castor*).

2268. Pontinus macrolepis Goode & Bean.

Yucatan.

Pontinus macrolepis Goode & Bean, Ocean. Ichth., 257, fig. 247, 1896, off Yucatan.

2269. Pontinus castor Poey.

Havana.

Pontinus castor Poey, Memorias, ii, 173, 1860, Havana.

2270. Pontinus pollux Poey.

Havana.

Pontinus pollux Poey, Memorias, II, 174, 1860, Havana.

2271. Pontinus rathbuni Goode & Bean.

Coast of North Carolina.

Pontinus rathbuni Goode & Bean, Ocean. Ichth., 255, fig. 245, 1896, off Cape Hatteras.

2272. Pontinus longispinis Goode & Bean.

Coast of western Florida.

Pontinus longispinis Goode & Bean, Ocean. Ichth., 258, fig. 246, 1896, west coast of Florida, lat. 28° 36′ N., long. 85° 33′ 30″ W., in 111 fathoms.

2273. Pontinus sierra (Gilbert).

Gulf of California.

Scorpæna (*Sebastoplus*) *sierra* Gilbert, Proc. U. S. Nat. Mus. 1890, 82, Gulf of California, at Albatross Stations 2996 and 3011 in 112 and 71 fathoms.

Genus 693. SETARCHES Johnson.

Setarches Johnson, Proc. Zool. Soc. Lond. 1862, 177 (*guntheri*).

2274. Setarches parmatus Goode.

Coasts of Rhode Island, North Carolina, and western Florida, in deep water.

Setarches parmatus Goode, Proc. U. S. Nat. Mus., III, 1880, 480, off coast of Rhode Island.

Family CLXXIX. HEXAGRAMMIDÆ.

Genus 694. PLEUROGRAMMUS Gill. *Atka Mackerels.*

Pleurogrammus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 166 (*monopterygius*).

2275. Pleurogrammus monopterygius (Pallas). *Atka Mackerel.*

North Pacific about Atka and other of the Aleutian Islands.

Labrax monopterygius Pallas, Mém. Ac. Sci. St. Petersb., II, 1810, 391, Unalaska.

Genus 695. HEXAGRAMMOS Steller.

Hexagrammos Steller, in Tilesius, Act. Ac. Petrop., II, 335, 1810 (*asper*).

2276. Hexagrammos decagrammus (Pallas). *Rock-trout; Boregat; Bodieron.*

North Pacific, from Point Conception to southern Alaska.

Labrax decagrammus Pallas, Mém. Ac. Petersb., II, 1810, 386, pl. 22, fig. 2, Elias Bay.

2277. Hexagrammos scaber Bean.

Coast of Alaska.

Hexagrammus scaber Bean, Proc. U. S. Nat. Mus. 1881, 154, coast of Alaska.

2278. Hexagrammos hexagrammus Pallas. *Starling.*

Pacific Coast of United States, from Unalaska to San Francisco.

Labrax hexagrammus Pallas, Mém. Ac. Petersb., II, 395, pl. 23, fig. 3, 1810, Kamchatka.

2279. Hexagrammos ordinatus (Cope).

Coast of Alaska.

Chirus ordinatus Cope, Proc. Amer. Philos. Soc. Phila. 1873, 28, Unalaska.

2280. Hexagrammos asper Steller. *Red Rock-trout.*

Alaska to Monterey.

Hexagrammos asper Steller, in Tilesius, Act. Ac. Petrop., II, 340, 1810, Port Peter and Paul, Kamchatka.

2281. Hexagrammos octogrammus (Pallas).

About Kamchatka and Aleutian Islands.

Labrax octogrammus Pallas, Zoogr. Rosso-Asiat., III, 283, 1811, Kamchatka and Aleutian Islands; doubtful species.

= velogrammus

= asper. = Stellen

= velogrammus

= Hexagrammos.

ANOPLOPOMATIDÆ

Genus 696. GRAMMATOPLEURUS Gill.

Grammatopleurus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 166 (*lagocephalus*).

2282. Grammatopleurus lagocephalus (Pallas).

Kuril Islands.

Labrax lagocephalus Pallas, Mém. Ac. Petersb., II, 384, 1810, Kuril Islands; doubtful species.

Genus 697. OPHIODON Girard.

Ophiodon Girard, Proc. Ac. Nat. Sci. Phila. 1854, 133 (*elongatus*).

2283. Ophiodon elongatus Girard. *Cultus-cod; Blue-cod; Buffalo-cod; Ling.*

Pacific Coast from Alaska to Santa Barbara.

Ophiodon elongatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 133, San Francisco.

Genus 698. ZANIOLEPIS Girard.

Zaniolepis Girard, Proc. Ac. Nat. Sci. Phila. 1857, 202 (*latipinnis*).

2284. Zaniolepis latipinnis Girard.

Coast of California, from San Francisco northward.

Zaniolepis latipinnis Girard, Proc. Ac. Nat. Sci. Phila. 1857, 202, Fort Steilacoom, Puget Sound.

2285. Zaniolepis frenatus Eigenmann.

Shore banks of southern California.

Zaniolepis frenatus Eigenmann, West American Scientist, November 9, 1889, 10, Cortez Banks, off San Diego.

Genus 699. OXYLEBIUS Gill.

Oxylebius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 277 (*pictus*).

2286. Oxylebius pictus Gill.

From Monterey northward to Puget Sound.

Oxylebius pictus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 277, California, no definite locality given.

Genus 700. ERILEPIS Gill.

Erilepis Gill, Science, January 26, 1894, 54 (*zonifer*).

2287. Erilepis zonifer (Lockington).

Monterey Bay, California.

Myriolepis zonifer Lockington, Proc. U. S. Nat. Mus. 1880, 248, Monterey Bay.

Genus 701. ANOPLOPOMA Ayres.

Anoplopoma Ayres, Proc. Cal. Ac. Sci. 1859, 27 (*merlangus*=*fimbria*).

2288. Anoplopoma fimbria (Pallas). *Beshow; Coal-fish.*

Monterey to Alaska.

Gadus fimbria Pallas, Zoogr. Rosso-Asiat., III, 200, 1811, no definite locality, probably the Aleutian Islands.

CLXXX. Family COTTIDÆ. The Sculpins.

Genus 702. JORDANIA Starks.

Jordania Starks, Proc. Ac. Nat. Sci. Phila. 1895, 410 (*zonope*).

2289. Jordania zonope Starks.

Puget Sound.

Jordania zonope Starks, Proc. Ac. Nat. Sci. Phila. 1895, 410, Port Orchard, Puget Sound.

Genus 703. PARICELINUS Eigenmann & Eigenmann.

Paricelinus Eigenmann & Eigenmann, West American Scientist, November 8, 1889, 131 (*hopliticus*).

2290. Paricelinus hopliticus Eigenmann & Eigenmann.

Cortez Banks, off San Diego, California.

Par[illegible]itious Eigenmann & Eigenmann, West American Scientist, 131, Cortez Banks, California.

2291. Paricelinus thoburni Gilbert.

Coast of Oregon.

Paricelinus thoburni Gilbert, Rept. U. S. Fish Com. 1893 (1896), 432, pl. 30, fig. 2, Albatross Station 3350, on coast of Oregon, in 75 fathoms.

Genus 704. SCORPÆNICHTHYS Girard.

Scorpænichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 131 (*marmoratus*).

2292. Scorpænichthys marmoratus (Ayres). *Cabezones.*

Pacific Coast of America from Puget Sound to San Diego.

Hemitripterus marmoratus Ayres, Proc. Cal. Ac. Sci. 1854, 4, San Francisco.

Genus 705. CHITONOTUS Lockington.

Chitonotus Lockington, Proc. U. S. Nat. Mus. 1881, 141 (*megacephalus*).

2293. Chitonotus pugetensis (Steindachner).

Puget Sound.

Artedius pugetensis Steindachner, Ichth. Beitr., v, 133, pl. 14, fig. 2, 1876, Puget Sound.

Genus 706. TARANDICHTHYS Jordan & Evermann.

Tarandichthys Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 225 (*filamentosus*).

2294. Tarandichthys cavifrons (Gilbert).

Coast of southern California.

Icelinus cavifrons Gilbert, Proc. U. S. Nat. Mus. 1890, 83, off Santa Barbara Islands, at Albatross Stations 2907 and 2945, in 44 and 30 fathoms.

2295. Tarandichthys filamentosus (Gilbert).

Coast of southern California.

Icelinus filamentosus Gilbert, Proc. U. S. Nat. Mus. 1890, 85, off Santa Barbara Islands, at Albatross Stations 2893 and 2959, in 145 and 55 fathoms.

2296. Tarandichthys tenuis (Gilbert).

Coast of southern California.

Icelinus tenuis Gilbert, Proc. U. S. Nat. Mus. 1890, 86, off Santa Barbara Islands, at Albatross Stations 2893, 2946, and others, in 45 to 150 fathoms.

Genus 707. ICELINUS Jordan.

Icelinus Jordan, Cat. Fish. N. A., 110, 1885 (*quadriseriatus*).

2297. Icelinus fimbriatus Gilbert.

Southern California.

Icelinus fimbriatus Gilbert, Proc. U. S. Nat. Mus. 1890, 87, off Santa Barbara Islands, at Albatross Stations 2893 and 2975, in 145 and 36 fathoms.

2298. Icelinus oculatus Gilbert.

Southern California.

Icelinus oculatus Gilbert, Proc. U. S. Nat. Mus. 1890, 87, off Santa Barbara Islands, at Albatross Station 2935, in 124 fathoms.

2299. Icelinus borealis Gilbert.

Coast of Alaska, north and south of Aleutian Islands, and in Bristol Bay.

Icelinus borealis Gilbert, Rept. U. S. Fish Com. 1893 (1896), 415, pl. 25, Aleutian Islands and Bristol Bay, at Albatross Stations 3213, 3214, and others, in 11 to 121 fathoms.

2300. Icelinus quadriseriatus (Lockington).

Off San Francisco, between Point Reyes and Golden Gate.

Artedius quadriseriatus Lockington, Proc. U. S. Nat. Mus. 1879, 330, off San Francisco.

Genus 708. ASTROLYTES Jordan & Starks.

Astrolytes Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 807 (*fenestralis*).

2301. Astrolytes notospilotus (Girard).

Coast of California from Straits of Fuca southward; abundant at Santa Barbara and Puget Sound.

Artedius notospilotus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 134, Tomales Bay, California.

ALCIDEA J+E.
A. tuberculata

Orthonopias trácei Starks + Mann
Pub. univ. Cal.
Pop San Diego + Mo

Eroplinys Gilbert — Proc
Monterey

Ruculcus Starks + Mann
R. saburrae

Arlecdius asperulus — Starks
Puget Sound

Axyrias harringtonii — Starks
Puget Sound.

Stelgistes elegnegen J.G.

Architaes plumarius J.G.

Arematicthlup [illegible] Gilbert. Nanaimo

2302. Astrolytes fenestralis (Jordan & Gilbert).
Puget Sound.
Artedius fenestralis Jordan & Gilbert, Proc. U. S. N. M. 1882, 578, Puget Sound.

Genus 709. ARTEDIUS Girard.
Artedius Girard, Proc. Ac. Nat. Sci. Phila. 1856, 134 (*lateralis*).

2303. Artedius lateralis (Girard).
Pacific Coast of North America, from Puget Sound to San Luis Obispo.
Scorpænichthys lateralis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 145, San Luis Obispo, California.

Genus 710. ARTEDIELLUS Jordan.
Artediellus Jordan, Cat. Fish. N. A., 110, 1885 (*uncinatus*).

2304. Artediellus uncinatus (Reinhardt).
Arctic Europe west to Greenland.
Cottus uncinatus Reinhardt, Vid. Selsk. Natur. Math. Afh. 1833, 44.

2305. Artediellus atlanticus Jordan & Evermann.
Labrador to Cape Cod.
Artediellus atlanticus Jordan & Evermann, Fishes North and Middle America, 1896, Massachusetts Bay.

2306. Artediellus pacificus Gilbert.
Coast of Alaska; in Bristol Bay, south of Sannak Island, and north of Unalaska.
Artediellus pacificus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 416, Unalaska, Sannak, Bristol Bay, at Albatross Station 3216, south of Sannak Island, many other stations in Bristol Bay, and station 3323 north of Unalaska, in 8 to 61 fathoms.

Genus 711. RUSCARIUS Jordan & Starks.
Ruscarius Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 805 (*meanyi*).

2307. Ruscarius meanyi Jordan & Starks.
Puget Sound, at Port Orchard, near Seattle.
Ruscarius meanyi Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 805, pl. 80, Port Orchard, Puget Sound.

Genus 712. RASTRINUS Jordan & Evermann.
Rastrinus Jordan & Evermann, new genus (*scutiger*).

2308. Rastrinus scutiger (Bean).
South of the Alaskan Peninsula.
Icelus scutiger Bean, Proc. U. S. Nat. Mus. 1890, 41, Trinity Islands, Alaska, at Albatross Station 2853, in 159 fathoms.

Genus 713. ICELUS Kroyer.
Icelus Kroyer, Natur. Tidsskr., I, 253, 1845 (*hamatus*).

2309. Icelus bicornis (Reinhardt).
Arctic seas, circumpolar; Spitzbergen to northern Russia, Finland, Alaska, Greenland, Labrador, and Cape Cod.
Cottus bicornis Reinhardt, Vid. Selsk. Natur. og Math. Afh., VIII, LXXV, Greenland.

2310. Icelus spiniger Gilbert.
Coast of Alaska, in the vicinity of Unalaska Island and in Bristol Bay.
Icelus spiniger Gilbert, Rept. U. S. Fish Com. 1893 (1896), 406, pl. 24, fig. 1, Bristol Bay and Unalaska, at Albatross Stations 3216, 3223, and many others, in 17 to 121 fathoms.

2311. Icelus euryops Bean.
Bering Sea, off Trinity Islands.
Icelus euryops Bean, Proc. U. S. Nat. Mus. 1890, 41, off Trinity Islands, at Albatross Station 2853, in 159 fathoms.

2312. Icelus vicinalis Gilbert.
Bristol Bay, Alaska.
Icelus vicinalis Gilbert, Rept. U. S. Fish Com. 1893 (1896), 413, Bristol Bay at Albatross Stations 3324, 3330, 3331, and 3332, in 109 to 406 fathoms.

2313. Icelus canaliculatus Gilbert.

Bering Sea, north of Unalaska.

Icelus canaliculatus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 412, pl. 24, fig. 2, off Unalaska, at Albatross Station 3329, in 399 fathoms.

2314. Icelus australis Eigenmann & Eigenmann.

Cortez Banks, off San Diego.

Icelus australis Eigenmann & Eigenmann, West Amer. Sci. 1889, 131, Cortez Banks, California.

Genus 714. RADULINUS Gilbert.

Radulinus Gilbert, Proc. U. S. Nat. Mus. 1890, 88 (*asprellus*).

2315. Radulinus asprellus Gilbert.

Coast of Oregon and Washington, and in Puget Sound.

Radulinus asprellus Gilbert, Proc. U. S. Nat. Mus. 1890, 88, off Oregon and Washington, at Albatross Stations 3046, 3057, and others, in 43 to 77 fathoms.

Genus 715. TRIGLOPS Reinhardt.

Triglops Reinhardt, Vid. Selsk. Natur. Math. Afh., v, LII (*pingeli*).

2316. Triglops xenostethus Gilbert.

Bering Sea, north of Unalaska Island.

Triglops xenostethus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 429, pl. 29, fig. 2, north of Unalaska, at Albatross Station 3220, in 34 fathoms.

2317. Triglops pingeli Reinhardt.

North Atlantic, from Spitzbergen and western Norway to Greenland and south to Cape Cod and Christiansund.

Triglops pingeli Reinhardt, Vid. Selsk. Natur., v, LII.

2318. Triglops beani Gilbert.

Alaska, both north and south of the Aleutian Islands and in Bristol Bay.

Triglops beani Gilbert, Rept. U. S. Fish Com. 1893 (1896), 426, pl. 28, fig. 1, Aleutian Islands and Bristol Bay, at Albatross Stations 3214, 3217, and many others, in 7¼ to 42 fathoms.

2319. Triglops scepticus Gilbert.

Aleutian Islands, south of Sannak and north of Unalaska Island.

Triglops scepticus Gilbert, Rept. U. S. Fish. Com. 1893 (1896), 428, pl. 28, fig. 2, Aleutian Islands, at Albatross Stations 3215, 3222, and others, in 43 to 138 fathoms.

Genus 716. PRIONISTIUS Bean.

Prionistius Bean, Proc. U. S. Nat. Mus. 1883, 355 (*macellus*).

2320. Prionistius macellus Bean.

British Columbia, in Carter Bay.

Prionistius macellus Bean, Proc. U. S. Nat. Mus. 1883, 355, Carter Bay, British Columbia.

Genus 717. ELANURA Gilbert.

Elanura Gilbert, Rept. U. S. Fish Com. 1893 (1896), 429 (*forficata*).

2321. Elanura forficata Gilbert.

Aleutian Islands, south of Sannak and north of Unimak Island.

Elanura forficata Gilbert, Rept. U. S. Fish Com. 1893 (1896), 430, pl. 30, fig. 1, Aleutian Islands, at Albatross Stations 3213, 3214, and 3222, in 38 to 50 fathoms.

Genus 718. MELLETES Bean.

Melletes Bean, Proc. U. S. Nat. Mus. 1879, 354 (*papilio*).

2322. Melletes papilio Bean.

Aleutian Islands.

Melletes papilio Bean, Proc. U. S. Nat. Mus. 1879, 354, St. Paul Island, Alaska.

~~[illegible] (omitted)~~

Paxillus boleoides: [illegible]

Ceratocottus viridulus

Pribilof

Genus 719. HEMILEPIDOTUS Cuvier.

Hemilepidotus Cuvier, Règne Animal, ed. 2, II, 165, 1829 (*hemilepidotus*).

2323. Hemilepidotus hemilepidotus (Tilesius).

Alaska to San Francisco; abundant in Puget Sound.
Cottus hemilepidotus Tilesius, Mém. Ac. Pétersb., III, 1810, 262, Sea of Okhotsk.

2324. Hemilepidotus jordani Bean.

Alaska; Unalaska. Bering Sea.
Hemilepidotus jordani Bean, Proc. U. S. Nat. Mus. 1881, 153, Unalaska.

Genus 720. CALYCILEPIDOTUS Ayres.

Calycilepidotus Ayres, Proc. Cal. Ac. Sci., I, 1855, 76 (*spinosus*).

2325. Calycilepidotus spinosus Ayres.

Coast of California; known only from about Monterey and San Francisco.
Calycilepidotus spinosus Ayres, Proc. Cal. Ac. Sci., I, 1855, 76, San Francisco.

Genus 721. ENOPHRYS Swainson.

Enophrys Swainson, Classn. Fish., II, 271, 1839 (*claviger*).

Subgenus ASPICOTTUS Girard.

Aspicottus Girard, Proc. Ac. Nat. Sci. Phila., 1854, 130 (*bison*).

2326. Enophrys bison (Girard).

San Francisco to Alaska; abundant about Puget Sound.
Aspicottus bison Girard, Proc. Ac. Nat. Sci. Phila. 1854, 130, Fort Steilacoom.

Subgenus ENOPHRYS Swainson.

2327. Enophrys claviger (Cuvier & Valenciennes).

Bering Sea.
Cottus claviger Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 195, 1829, Kamchatka.

Genus 722. CERATOCOTTUS Gill.

Ceratocottus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 165 (*diceraus*).

2328. Ceratocottus diceraus (Pallas).

Alaska and Kamchatka.
Cottus diceraus Pallas, Nov. Act. Petropol., 1783, 354, pl. 10, fig. 7, Petropaulski, Kamchatka.

Genus 723. COTTUS (Artedi) Linnæus. *Miller's Thumbs.*

Cottus Linnæus, Syst. Nat., ed. x, 264, 1758 (*gobio*).

Subgenus PEGEDICTIS Rafinesque. Polarocottus

Pegedictis Rafinesque, Ichth. Ohiensis, 85, 1820 (*ictalops*).

2329. Cottus asper Richardson. *Prickly Bullhead.*

Streams of the Cascade Range, from Vancouver Island to Oregon.
Cottus asper Richardson, Fauna Bor.-Amer., Fish., 295, 1836, Columbia River at Fort Vancouver.

2330. Cottus gulosus (Girard).

Streams of the Coast Range in California, south to Point Conception.
Cottopsis gulosus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 129, San Mateo Creek and San Joaquin River, California.

2331. Cottus rhotheus (Rosa Smith).

Hangman Creek, Tekoa, Washington, and elsewhere in Columbia River basin.
Uranidea rhothea Rosa Smith, Proc. U. S. Nat. Mus. 1882, 347, Spokane Falls, Washington.

2332. Cottus shasta Jordan & Starks.

Upper Sacramento Basin, about Mount Shasta.
Cottus shasta Jordan & Starks, Proc. Cal. Ac. Sci. 1896, 224, McCloud River, Baird, Shasta County, California.

2333. Cottus semiscaber (Cope). *Rocky Mountain Bullhead.*

Rocky Mountain region in clear streams on both slopes; abundant in Colorado, northern New Mexico, Wyoming, Montana, Idaho, Utah, eastern Washington, and Oregon.

Cottopsis semiscaber Cope, Hayden Surv. Mont., 1871, 476, Fort Hall, Idaho.

2334. Cottus punctulatus (Gill).

Headwaters of Green River, Wyoming.

Potamocottus punctulatus Gill, Proc. Bost. Soc. Nat. Hist., VIII, 1861, 40, Bridger Pass, Wyoming.

2335. Cottus ictalops (Rafinesque). *Miller's Thumb; Blob; Muffle-jaw; Bullhead; Spring-fish.*

Middle and Northern States, east of the Dakotas and Nebraska, southward along the Alleghanies to North Carolina and northern Alabama.

Pegedictis ictalops Rafinesque, Ichth. Ohiensis, 85, 1820, spring near Lexington, Kentucky.

Subgenus TAURIDEA Jordan & Evermann.

Tauridea Jordan & Evermann, Fishes N. and M. Amer., 1896 (*ricei*).

2336. Cottus ricei (Nelson).

Lake Michigan, near Evanston, Illinois.

Cottopsis ricei Nelson, Bull. Ill. Mus. Nat. Hist., 40, 1876, Lake Michigan at Evanston.

Subgenus COTTUS (Artedi) Linnæus.

2337. Cottus onychus Eigenmann & Eigenmann.

Saskatchewan Basin.

Cottus onychus Eigenmann & Eigenmann, Am. Nat., November, 1892, 963, Bow River, at Calgary, a tributary of the South Saskatchewan, Alberta Territory.

2338. Cottus pollicaris (Jordan & Gilbert).

Lake Michigan.

Uranidea pollicaris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 222, Lake Michigan, off Racine, Wisconsin.

2339. Cottus cognatus Richardson. *Great Bear Lake Bullhead.*

Great Bear Lake, British America.

Cottus cognatus Richardson, Fauna Bor.-Amer., III, 40, 1836, Great Bear Lake.

2340. Cottus perplexus Gilbert & Evermann.

Skookumchuck and Newaukum rivers, near Chehalis, Washington.

Cottus perplexus Gilbert & Evermann, Bull. U. S. Fish Com. 1894, 202, pl. 20, fig. 1, Skookumchuck River, near Chehalis, Washington.

2341. Cottus aleuticus Gilbert.

Unalaska, in small stream passing through the village of Unalaska; Departure Bay, Vancouver Island.

Cottus aleuticus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 418, streams of Unalaska; also in Departure Bay, Vancouver Island.

2342. Cottus minutus Pallas.

Island of Talek, near Tanisk, Sea of Okhotsk.

Cottus minutus Pallas, Zoogr. Rosso-Asiat., III, 145, 1811, Talek Island, Sea of Okhotsk.

2343. Cottus beldingi Eigenmann & Eigenmann.

Streams of Columbia River basin, south to Lake Lahontan; abundant east of the Cascades and in Lake Tahoe.

Cottus beldingi Eigenmann & Eigenmann, Am. Nat., XXV, 1891, 1132, Lake Tahoe.

2344. Cottus philonips Eigenmann & Eigenmann.

Columbia River basin at Field, British Columbia, and in Idaho.

Cottus philonips Eigenmann & Eigenmann, Am. Nat., XXVI, 1892, 963, Kicking Horse River, Field, British Columbia.

Collins ichalaps is a hopelessly muddled mixture of Collins and Calonders, mostly the first.

= richardsonii

Urania lenis Fermiana.

MYOXICEPHALUS Stellat.

2345. Cottus annæ Jordan & Starks.

Eagle River, a tributary of Grand River, Colorado, Colorado River basin.
Cottus annæ Jordan & Starks, Proc. Cal. Ac. Sci. 1896, 223, Eagle River at Gypsum, Colorado.

2346. Cottus spilotus (Cope).

Grand Rapids, on the Grand River, which flows into Lake Michigan.
Uranidea spilota Cope, Proc. Ac. Nat. Sci. Phila. 1865, 182, Grand River at Grand Rapids, Michigan.

2347. Cottus leiopomus Gilbert & Evermann.

Wood River, Shoshone, Idaho.
Cottus leiopomus Gilbert & Evermann, Bull. U. S. Fish Com. 1894, 203, pl. 20, fig. 2, Wood River, Shoshone, Idaho.

Genus 724. URANIDEA DeKay. = Cottus!

Uranidea DeKay, New York Fauna: ~~Fishes, 61, 1842~~ (*quiescens*=*gracilis*).

2348. Uranidea bendirei (Bean).

Walla Walla, Washington; Rattlesnake Creek near Camp Harney, Oregon, and Goose Creek near Meadows, Idaho.
Potomacottus bendirei Bean, Proc. U. S. Nat. Mus. 1881, 27, Rattlesnake Creek near Camp Harney, Oregon.

2349. Uranidea marginata Bean.

Tributaries of Walla Walla River, Washington.
Uranidea marginata Bean, Proc. U. S. Nat. Mus. 1881, 26, Walla Walla, Washington.

2350. Uranidea franklini (Agassiz).

Lake Superior.
Cottus franklini Agassiz, Lake Superior, 303, 1850, north and east shores of Lake Superior.

2351. Uranidea kumlienii Hoy.

Lake Michigan, in deep water.
Uranidea kumlienii Hoy, in Nelson, Bull. Ill. Mus. Nat. Hist., vol. 1, No. 1, 41, 1876, Lake Michigan, in deep water.

2352. Uranidea gracilis (Heckel).

Streams of New England and New York; recorded from tributaries of the Connecticut, Lake Champlain, Hudson, Delaware, and Susquehanna.
Cottus gracilis Heckel, Ann. Wien. Mus., II, 1840, 148, New England.

2353. Uranidea formosa (Girard).

Lake Ontario, in deep water.
Cottus formosus Girard, Monogr. Cott., 58, 1850, Lake Ontario, off Oswego, in stomach of *Lota maculosa*.

2354. Uranidea hoyi Putnam.

Lake Michigan, in deep water.
Uranidea hoyi Putnam, in Nelson, Bull. Ill. Mus. Nat. Hist., vol. 1, No. 1, 41, 1876, Lake Michigan, in deep water.

Genus 725. ARGYROCOTTUS Herzenstein.

Argyrocottus Herzenstein, Melanges Biol. Ac. Imp. Sci., XIII, 1892, 219, St. Petersburg (*zanderi*).

2355. Argyrocottus zanderi Herzenstein.

Korsakow, Sakhalin.
Argyrocottus zanderi Herzenstein, Melanges Biol. Ac. Imp. Sci., XIII, 1892, 219, Korsakow, Sakhalin.

Genus 726. ACANTHOCOTTUS Girard. *Great Sculpins.*

Acanthocottus Girard, Proc. Bost. Soc. Nat. Hist., III, 1849, 185 (*grœnlandicus*).

2356. Acanthocottus æneus (Mitchill). *Grubby.*

Coast of southern New England and New York.
Cottus æneus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 380, New York.

2357. Acanthocottus octodecimspinosus (Mitchill). *Common Sculpin; Eighteen-spined Sculpin.*

Atlantic Coast south to Virginia; common, northward.

Cottus octodecimspinosus Mitchill, Trans. Lit. Phil. Soc. N. Y., I, 1815, 380, New York.

2358. Acanthocottus platycephalus (Pallas).

Kamchatka.

Cottus platycephalus Pallas, Zoogr. Rosso-Asiat., III, 135, 1811, Kamchatka; after Steller.

2359. Acanthocottus scorpioides (Fabricius).

Arctic regions of America, Greenland to Siberia.

Cottus scorpioides Fabricius, Fauna Grœnl., 157, 1780, Greenland.

2360. Acanthocottus scorpius (Linnæus). *European Sculpin.*

Northern Europe and Arctic regions, not common on our coasts; recorded by Dr. Lütken from the Baltic, Finland, Spitzbergen, Nova Zembla, coasts of England and northern Asia; also from Eastport, Maine.

Cottus scorpius Linnæus, Syst. Nat., ed. x, 265, 1758, in Atlantic Ocean off Europe.

2361. Acanthocottus grœnlandicus (Cuvier & Valenciennes). *Daddy Sculpin.*

New York to Greenland; according to Fabricius it is abundant in all the bays and inlets of Greenland.

Cottus grœnlandicus Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 156, 1829, no locality given, probably Greenland; after Fabricius.

2362. Acanthocottus polyacanthocephalus (Pallas).

Puget Sound to Alaska; very abundant northward.

Cottus polyacanthocephalus Pallas, Zoogr. Rosso-Asiat., III, 133, 1811, no locality.

2363. Acanthocottus humilis (Bean). = Jaok.

Chamisso Island, near Bering Straits.

Cottus humilis Bean, Proc. U. S. Nat. Mus., IV, 1881, 149, Chamisso Island, Bering Straits.

2364. Acanthocottus jaok (Cuvier & Valenciennes).

Kamchatka.

Cottus jaok Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 172, 1829, Kamchatka.

Subgenus BOREOCOTTUS Gill.

No Chars

Boreocottus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 166 (*axillaris*). ?

2365. Acanthocottus verrucosus (Bean).

Plover Bay, Siberia, near Bering Straits.

Cottus verrucosus Bean, Proc. U. S. Nat. Mus., IV, 1881, 152, Plover Bay, Siberia.

2366. Acanthocottus niger (Bean).

St. Paul Island, Bering Sea.

Cottus niger Bean, Proc. U. S. N. M., IV, 1881, 151, St. Paul Island, Bering Sea.

2367. Acanthocottus axillaris (Gill).

Bering Straits.

Boreocottus axillaris Gill, Proc. Ac. Nat. Sci. Phila. 1859, 166, Bering Straits.

2368. Acanthocottus polaris (Sabine).

East side of the peninsula of Boothia.

Cottus polaris Sabine, Appendix Parry's First Voyage, CCXIII, 1819, north Georgia; not recognized by recent writers, the generic relations uncertain; Lütken compares it with *Icelus bicornis*, but it must be different

2369. Acanthocottus quadrifilis (Gill).

Bering Straits.

Porocottus quadrifilis Gill, Proc. Ac. Nat. Sci. Phila. 1859, 166, Bering Straits.

2370. Acanthocottus sellaris Gilbert.

Bristol Bay, Alaska.

Acanthocottus sellaris Gilbert, Rept. U. S. Fish Com. 1893 (1896), 419, Bristol Bay, at Albatross Stations 3229, 3231, and others, in 5 to 17 fathoms.

Cottus tentacularis Lütken

MYOXOCEPHALUS STELLERI Tilesius
Kamchatka.
(= decastrensis K
myoxocephalus NIVOSUS Herzens

Zerticelus bogoslovius Jordan & Gilbert
Bogoslof Island.

Oncorhynchus kisutch

Megalocottus laticeps
platycephalus = ~~Icelostrecus~~
taeniopterus

T. ontariensis Jor + Thompson
Pure U.S. N. Y. 1840

Genus 727. ZESTICELUS* Jordan & Evermann.

Zesticelus Jordan & Evermann, new genus (*profundorum*).

2371. Zesticelus profundorum (Gilbert).

Bering Sea, north of Unalaska.

Acanthocottus profundorum Gilbert, Rept. U. S. Fish Com. 1893 (1896), 423, pl. 26, fig. 1, Bering Sea, north of Unalaska, at Albatross Station 3329, in 399 fathoms.

Genus 728. ONCOCOTTUS Gill. = ~~Myoxocephalus~~

Oncocottus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 13 (*quadricornis*).

2372. Oncocottus labradoricus (Girard). = hexacornis Rich.

York Factory, Hudson Bay.

Acanthocottus labradoricus Girard, Bost. Jour. Nat. Hist., VI, 1850, 247, York Factory, Hudson Bay.

2373. Oncocottus quadricornis (Linnæus).

Arctic America to Baltic Sea, chiefly northward; abundant in eastern Baltic and in Lakes Ladoga and Onega; north to White Sea and Nova Zembla; rare in England and eastern Greenland; unknown in western Greenland.

Cottus quadricornis Linnæus, Syst. Nat., ed. x, 264, 1758, Baltic Sea.

2374. ~~Oncocottus~~ Megalocottus laticeps (Gilbert). = M. platycephalus Pallas ?

Alaska, from Nushagak River near its mouth; one from Herendeen Bay on the northern side of Alaska Peninsula.

Acanthocottus laticeps Gilbert, Rept. U. S. Fish Com. 1893 (1896), 422, pls. 26 and 27, Nushagak River and Herendeen Bay, Alaska.

Genus 729. TRIGLOPSIS Girard.

Triglopsis Girard, Proc. Bost. Soc. Nat. Hist., IV, 1851, 18 (*thompsoni*).

2375. Triglopsis thompsoni Girard.

Deep waters of Great Lakes; known from Lakes Michigan and Ontario.

Triglopsis thompsoni Girard, Proc. Bost. Soc. Nat. Hist., IV, 1851, 19, Lake Ontario, off Oswego, New York.

Genus 730. DASYCOTTUS Bean.

Dasycottus Bean, Proc. U. S. Nat. Mus. 1890, 42 (*setiger*).

2376. Dasycottus setiger Bean.

North Pacific, off Sitkalidak Island; Puget Sound.

Dasycottus setiger Bean, Proc. U. S. Nat. Mus. 1890, 42, off Sitkalidak Island, 57° N., 153° 18′ W., at Albatross Station 2855, in 69 fathoms.

Genus 731. COTTUNCULUS Collett.

Cottunculus Collet, Norges Fiske, 20, 1875 (*microps*).

2377. Cottunculus microps Collett.

Deep water, off coasts of Norway and Rhode Island.

Cottunculus microps Collett, Norges Fiske, 20, pl. I, figs. 1–3, 1875, Hasvig, near Hammerfest, Norway, in 200 fathoms.

2378. Cottunculus thomsonii (Günther).

North Atlantic, in deep water.

Cottus thomsonii Günther, Proc. Royal Soc. Edinburgh, XI, 1882, 679, Faröe Channel, in 535 fathoms.

Genus 732. MALACOCOTTUS Bean.

Malacocottus Bean, Proc. U. S. Nat. Mus. 1890, 42 (*zonurus*).

2379. Malacocottus zonurus Bean.

Coast of Alaska, off Trinity Islands.

Malacocottus zonurus Bean, Proc. U. S. Nat. Mus. 1890, 43, off Trinity Islands, Alaska, 56° N., 154° W., at Albatross Station 2853, in 159 fathoms.

* Distinguished from *Acanthocottus* by its cavernous skeleton; associated with its deep-water habitat.

Genus 733. GYMNOCANTHUS Swainson.

Gymnocanthus Swainson, Classn. Fishes, etc., 271, 1839 (*ventralis*).

2380. Gymnocanthus pistilliger (Pallas).

Coasts of Alaska; taken abundantly in Bristol Bay.
Cottus pistilliger Pallas, Zoogr. Rosso-Asiat., III, 143, 1811, Unalaska Island.

2381. Gymnocanthus tricuspis (Reinhardt).

Arctic seas, south to Norway and Labrador; not very common on our coasts.
Cottus tricuspis Reinhardt, Vidensk. Selsk. Nat. Math., V, III.

2382. Gymnocanthus galeatus Bean.

Aleutian Islands.
Gymnocanthus galeatus Bean, Proc. U. S. Nat. Mus. 1881, 153, Unalaska.

Genus 734. LEIOCOTTUS Girard.

Leiocottus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 133 (*hirundo*).

2383. Leiocottus hirundo Girard.

Santa Barbara Islands; extremely local.
Leiocottus hirundo Girard, Proc. Ac. Nat. Sci. Phila. 1856, 133, San Miguel Island, near Santa Barbara, California.

Genus 735. LEPTOCOTTUS Girard.

Leptocottus Girard. Proc. Ac. Nat. Sci. Phila. 1854, 130 (*armatus*).

2384. Leptocottus armatus Girard.

Pacific Coast, from Kodiak to San Diego.
Leptocottus armatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 131, Cape Flattery, Fort Steilacoom, Shoalwater Bay, Humboldt Bay, San Francisco, Monterey, San Pedro, Fort Point, San Diego, and Tomales Bay.

Genus 736. CLINOCOTTUS Gill.

Clinocottus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 166 (*analis*).

2385. Clinocottus analis (Girard).

Coast of California, from Monterey to Lower California.
Oligocottus analis Girard, Proc. Ac. Nat. Sci. Phila. 1857, 201, Monterey.

Genus 737. OLIGOCOTTUS Girard.

Oligocottus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 133 (*maculosus*).

2386. Oligocottus maculosus Girard. *Johnny.*

Pacific Coast, from Cape Mendocino to Point Conception.
Oligocottus maculosus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 153, Tomales Bay, San Francisco.

2387. Oligocottus borealis Jordan & Snyder.

Pacific Coast of America from Sitka to Cape Mendocino.
Oligocottus borealis Jordan & Snyder, Proc. Cal. Ac. Sci. 1896, 225, Neah Bay and Seattle, Washington.

2388. Oligocottus acuticeps Gilbert.

Alaska to Cape Flattery; Departure Bay, Vancouver Island.
Oligocottus acuticeps Gilbert, Rept. U. S. Fish Com. 1893 (1896), 432, Unalaska.

Genus 738. BLENNICOTTUS Gill.

Blennicottus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 166 (*globiceps*).

2389. Blennicottus embryum Jordan & Starks.

Pacific Coast of America, from Puget Sound to Monterey, California.
Oligocottus embryum Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 808, pl. 82, Neah Bay, Washington.

2390. Blennicottus globiceps (Girard).

Pacific Coast, from Coronados Island northward to Cape Mendocino.
Oligocottus globiceps Girard, U. S. Pac. R. R. Surv., Fish., 58, 1858, South Farallones.

Nauchetthy fireblovius
St Paul.

2390a. Blennicottus globiceps bryosus Jordan & Starks.

Puget Sound.

Blennicottus globiceps bryosus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 808, Neah Bay, Washington.

Genus 739. HISTIOCOTTUS Gill.

Histiocottus Gill, Proc. U. S. Nat. Mus. 1888, 573 (*bilobus*).

2391. Histiocottus bilobus (Cuvier & Valenciennes).

Coast of Alaska and Kamchatka.

Blepsias bilobus Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 379, 1829, no locality; somewhere in Kamchatka.

Genus 740. BLEPSIAS Cuvier.

Blepsias Cuvier, Règne Animal, ed. 2, II, 167, 1829 (*cirrhosus*).

2392. Blepsias cirrhosus (Pallas).

Alaska to San Francisco; common at Unalaska, but not often south of Puget Sound.

Trachinus cirrhosus Pallas, Zoogr. Rosso-Asiat., III, 237, 1811, Bering Sea.

Genus 741. NAUTICHTHYS Girard.

Nautichthys Girard, Pac. R. R. Surv., Fishes, 74, 1858 (*oculofasciatus*).

2393. Nautichthys oculofasciatus (Girard).

Pacific Coast, Alaska to San Francisco, chiefly northward; common in Bristol Bay and about Unalaska.

Blepsias oculofasciatus Girard, Proc. Ac. Nat. Sci. Phila. 1857, 202, Fort Steilacoom, Washington.

Genus 742. ULCA Jordan & Evermann.

Ulca Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 227 (*marmoratus*).

2394. Ulca marmorata (Bean).

Alaska, off Sitkalidak Island.

Hemitripterus marmoratus Bean, Proc. U. S. Nat. Mus. 1890, 43, off Sitkalidak Island.

Genus 743. HEMITRIPTERUS Cuvier.

Hemitripterus Cuvier, Règne Animal, ed. 2, II, 164, 1829 (*americanus*).

2395. Hemitripterus americanus (Gmelin). *Sea-raven.*

Atlantic Coast of America, chiefly northward, from Cape Cod to Labrador.

Scorpæna americana Gmelin, Syst. Nat., ed. XIV, 1220, 1788, no locality given.

2396. Hemitripterus cavifrons Lockington.

Coast of Alaska.

Hemitripterus cavifrons Lockington, Proc. Ac. Nat. Sci. Phila. 1880, 233, Kodiak Island, Alaska.

Genus 744. SYNCHIRUS Bean.

Synchirus Bean, Proc. U. S. Nat. Mus., XII, 1889, 641 (*gilli*).

2397. Synchirus gilli Bean.

Barclay Sound, British Columbia.

Synchirus gilli Bean, Proc. U. S. Nat. Mus., XII, 1889, 642, Barclay Sound.

Genus 745. ASCELICHTHYS Jordan & Gilbert.

Ascelichthys Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 264 (*rhodorus*).

2398. Ascelichthys rhodorus Jordan & Gilbert.

Pacific Coast from Sitka to Cape Mendocino; abundant in Neah Bay.

Ascelichthys rhodorus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 264, Waadda Island, Neah Bay, near Cape Flattery.

Genus 746. PSYCHROLUTES Günther.

Psychrolutes Günther, Cat., III, 516. 1861 (*paradoxus*).

2399. Psychrolutes paradoxus Günther.

Gulf of Georgia, Vancouver Island.

Psychrolutes paradoxus Günther, Cat., III, 516, 1861, Gulf of Georgia.

Genus 747. GILBERTINA Jordan & Starks.

Gilbertina Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 811 (*sigolutes*).

2400. Gilbertina sigolutes Jordan & Starks.

Puget Sound.

Gilbertina sigolutes Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 811, pl. 84, Port Orchard, near Seattle.

Family CLXXXI. RHAMPHOCOTTIDÆ.

Genus 748. RHAMPHOCOTTUS Günther.

Rhamphocottus Günther, Ann. Mag. Nat. Hist., XIV, 1874, 370 (*richardsoni*).

2401. Rhamphocottus richardsoni Günther.

North Pacific, Alaska to Monterey; not infrequent in Puget Sound.

Rhamphocottus richardsoni Günther, Ann. Mag. Nat. Hist., XIV, 1874, 370, Fort Rupert, British America.

Family CLXXXII. AGONIDÆ.

Genus 749. HIPPOCEPHALUS Swainson.

Hippocephalus Swainson, Nat. Hist. Fishes, etc., II, 272, 1839 (*superciliosus*).

2402. Hippocephalus japonicus (Pallas).

North Pacific; Kuril Islands; Gulf of Patience; Sakhalin Island; Okhotsk Sea.

Cottus japonicus Pallas, "Spicilegia Zoologia, VII, 30, pl. 5, figs. 1-3, 1772," Kuril Islands.

Genus 750. AGONOMALUS Guichenot.

Agonomalus Guichenot, Mém. Soc. Sci. Nat. de Cherbourg, 252, pl. 9, 1866 (*proboscidalis*).

2403. Agonomalus proboscidalis (Valenciennes).

Port of the Emperor Nicholas, Gulf of Tartary.

Aspidophorus proboscidalis Valenciennes, Comptes Rendus de l'Academie des Sciences, XLVII, 1040, 1858, Gulf of Tartary.

Genus 751. HYPSAGONUS Gill.

Hypsagonus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 259 (*quadricornis*).

2404. Hypsagonus quadricornis (Cuvier & Valenciennes).

North Pacific; Kamchatka; Bering Sea and coasts of Alaska south to Bristol Bay and Puget Sound.

Aspidophorus quadricornis Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 221, 1829, Kamchatka.

Genus 752. BRACHYOPSIS Gill.

Brachyopsis Gill, Proc. Ac. Nat. Sci. Phila. XIII, 1861, 167, 259 (*rostratus*).

2405. Brachyopsis verrucosus Lockington.

Coast of California, south to San Francisco.

Brachyopsis verrucosus Lockington, Proc. U. S. Nat. Mus., III, May 6, 1880, 60, Drake Bay, near San Francisco.

2406. Brachyopsis rostratus (Tilesius).

North Pacific, from Sakhalin, Gulf of Aniva, and the Kuril Islands.

Agonus rostratus Tilesius, Mém. Ac. Petersb., IV, pl. 14, 1810, Sakhalin, Gulf of Aniva.

2407. Brachyopsis dodecædrus (Tilesius).

North Pacific, Kamchatka, Bristol Bay, coast of Alaska.

Agonus dodecædrus Tilesius, Mém. Ac. Petersb., IV, pl. 13, 1810, Kamchatka.

2408. Brachyopsis segaliensis (Tilesius).

Island of Sakhalin.

Syngnathus segaliensis Tilesius, Mém. Soc. Imp. Nat. de Moscow, II, 216, pl. 14, 1810, Bay of Patience, Sakhalin Island.

749 Percis Scopoli

Who?

WISITZIA.

Vermicularia = new genus: with dodecaedron

Pallasina aix Starks
Puget Sound.

AGONUS CAIMPHRACTUS L.
~~ORCAGONUS~~
Davis Straits Cr Greenland
Spec. rec'd from Dundee.

Podotheca cristatus. sp.

Podotheca ~~Cornigus~~ lucani.

Averrunceus sterletus Gilbert
Monterey

Genus 753. STELLERINA* Cramer.

Stellerina Cramer, new genus (*xyosternus*).

2409. Stellerina xyosterna (Jordan & Gilbert).

Coast of California and Oregon.

Brachyopsis xyosternus Jordan & Gilbert, Proc. U. S. Nat. Mus., III, July 2, 1888, 152, Santa Cruz, California.

Genus 754. PALLASINA Cramer.

Pallasina Cramer, Proc. Cal. Ac. Sci. 1895, 815 (*barbatus*).

2410. Pallasina barbata (Steindachner).

North Pacific, south to Japan.

Siphagonus barbatus Steindachner, Ichth. Beitr., V, 140, pl. 5, Sitzb. der K. Ac. der Wiss., LXXIV, July, 1876, Hakodate and Nagasaki, Japan.

Genus 755. LEPTAGONUS Gill.

Leptagonus Gill, Proc. Ac. Nat. Sci. Phila., XIII, 1861, 167, 259 (*spinosissimus* = *decagonus*).

2411. Leptagonus decagonus (Bloch & Schneider).

Arctic Ocean, south to Newfoundland and Norway.

Agonus decagonus Bloch & Schneider, Syst. Ichth., I, 105, pl. 27, 1801, erroneously recorded from the East Indies, the type from Greenland.

Genus 756. PODOTHECUS Gill.

Podothecus Gill, Proc. Ac. Nat. Sci. Phila., XIII, 1861, 77, 259 (*peristethus* = *acipenserinus*).

2412. Podothecus accipiter Jordan & Starks.

Robben Island.

Podothecus accipiter Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 816, pl. 88, Robben Island, Okhotsk Sea.

2413. Podothecus gilberti (Collett).

Kamchatka.

Agonus gilberti Collett, Proc. Zool. Soc. Lond. 1894, 670, pl. 45, Kamchatka.

2414. Podothecus acipenserinus (Tilesius). *Common Alligator-fish.*

Kamchatka to Puget Sound.

Agonus acipenserinus Tilesius, Mém. Ac. Petersb., IV, 1811, 422, pl. 11, fig. 163, Unalaska.

2415. Podothecus veternus Jordan & Starks.

Robben Island.

Podothecus veternus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 819, pl. 89, Robben Island, Okhotsk Sea.

Genus 757. STELGIS Cramer.

Stelgis Cramer, Proc. Cal. Ac. Sci. 1895, 821 (*vulsus*).

2416. Stelgis vulsus (Jordan & Gilbert).

Off San Francisco.

Agonus vulsus Jordan & Gilbert, Proc. U. S. Nat. Mus., III, 1880, 330, Point Reyes, near San Francisco.

Genus 758. AVERRUNCUS Jordan & Starks.

Averruncus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 824 (*emmelane*).

2417. Averruncus emmelane Jordan & Starks.

Puget Sound, near Port Orchard.

Averruncus emmelane Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 821, pl. 91, Port Orchard, Puget Sound.

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* Distinguished by the armature, especially that of the breast, which is reduced to prickles.

Genus 759. SARRITOR Cramer.

Sarritor Cramer, in Jordan & Evermann, Fishes North and Middle America, 1896 (*frenatus*).

2418. Sarritor frenatus (Gilbert).

Coast of Alaska.

Odontopyxis frenatus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 435, pl. 30, fig. 3, Alaska and Aleutian Islands, at Albatross Stations 3219, 3225, and many others, in 16 to 351 fathoms.

2419. Sarritor leptorhynchus (Gilbert).

Coast of Alaska.

Odontopyxis leptorhynchus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 437, north and south of the Alaskan peninsula, at Albatross Stations 3215, 3219, and others, in 32 to 59 fathoms.

Genus 760. XYSTES Jordan & Starks.

Xystes Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 824 (*axinophrys*).

2420. Xystes axinophrys Jordan & Starks.

Puget Sound.

Xystes axinophrys Jordan & Starks, Proc. Cal. Ac. Sci. 1885, 824, pl. 92, Port Orchard, Admiralty Inlet.

Genus 761. BATHYAGONUS Gilbert.

Bathyagonus Gilbert, Proc. U. S. Nat. Mus., XIII, 1890, 89 (*nigripinnis*).

2421. Bathyagonus nigripinnis Gilbert.

North Pacific, known from the Aleutian Islands, Bering Sea, south to the coast of Washington.

Bathyagonus nigripinnis Gilbert, Proc. U. S. Nat. Mus. 1890, 89, coast of Washington, at Albatross Station 3073, in 477 fathoms.

Genus 762. XENOCHIRUS Gilbert.

Xenochirus Gilbert, Proc. U. S. Nat. Mus., XIII, 1890, 90 (*triacanthus*).

2422. Xenochirus pentacanthus Gilbert.

Coast of Washington.

Xenochirus pentacanthus Gilbert, Proc. U. S. Nat. Mus. 1890, 91, coast of Washington, at Albatross Station 3076, in 178 fathoms.

2423. Xenochirus alascanus Gilbert.

Aleutian Islands.

Xenochirus alascanus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 438, Unimak Pass, Aleutian Islands, at Albatross Stations 3216, 3219, and others, in 35 to 138 fathoms.

2424. Xenochirus latifrons Gilbert.

North Pacific Coast, from Oregon to San Diego.

Xenochirus latifrons Gilbert, Proc. U. S. Nat. Mus. 1890, 92, off coast of Oregon and San Diego, at Albatross Stations 2898, 2935, etc., in 61 to 158 fathoms.

2425. Xenochirus triacanthus Gilbert.

Pacific Coast, from Santa Barbara to Washington.

Xenochirus triacanthus Gilbert, Proc. U. S. Nat. Mus. 1890, 91, off coast of California Oregon, and Washington, at Albatross Stations 2893, 2973, and 3059 in 145, 68, and 77 fathoms.

Genus 763. ODONTOPYXIS Lockington

Odontopyxis Lockington, Proc. U. S. Nat. Mus., II, 1879, 328 (*trispinosus*).

2426. Odontopyxis trispinosus Lockington

Pacific Coast of United States, from Puget Sound to Santa Barbara.

Odontopyxis trispinosus Lockington, Proc. U. S. Nat. Mus., II, 1879, 328, San Francisco.

79. Z Averrunci emendanda.

Xenentmus. subst. for Xenocheirus proc

Asterathecas Leibert. pentacanthus

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Genus 764. BOTHRAGONUS Gill.

Bothragonus Gill, in Jordan & Gilbert, Synopsis, 728, 1883 (*swanii*).

2427. Bothragonus swanii (Steindachner).

Puget Sound.

Hypsagonus swanii Steindachner, Ichth. Beitr., v, 144, pl. 4, Sitzb. der Akad. Wiss., LXXIV, July, 1876, Port Townsend, Washington.

Genus 765. ASPIDOPHOROIDES Lacépède.

Aspidophoroides Lacépède, Hist. Nat. Poiss., III, 228, 1802 (*tranquebar* = *monopterygius*).

Subgenus ULCINA Cramer.

Ulcina Cramer, new subgenus (*olrikii*).

2428. Aspidophoroides olrikii Lütken.

Arctic Ocean; known from west coast of Greenland, Davis Strait, Kara Sea, Barrants Bay, and Nova Zembla.

Aspidophoroides olrikii Lütken, Forelob. Meddel. om Nord Ulkefische, Vidensk. Meddel. Naturhist., Foren. Kjob. 386, with 3 figures, 1876, Greenland.

Subgenus ASPIDOPHOROIDES Lacépède.

2429. Aspidophoroides guntheri Bean.

Coast of Alaska.

Aspidophoroides güntheri Bean, Proc. U. S. Nat. Mus. 1885, 74, Alaska.

2430. Aspidophoroides monopterygius (Bloch)

Greenland to Cape Cod.

Cottus monopterygius Bloch, Ichth., II, 156, pl. 178, figs. 1, 2, 1786, Tranquebar; an error.

2431. Aspidophoroides bartoni Gilbert.

Aleutian Islands.

Aspidophoroides bartoni Gilbert, Rept. U. S. F. C. 1893 (1896), 434, Aleutian Islands and Bristol Bay, Alaska, at Albatross Stations 3213, 3223, and many others, in 11½ to 121 fathoms.

Subgenus ANOPLAGONUS Gill.

Anoplagonus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 259 (*inermis*).

2432. Aspidophoroides inermis Günther.

Coasts of Alaska, south to Vancouver Island.

Aspidophoroides inermis Günther, Cat., II, 524, 1860, Vancouver Island.

Family CLXXXIII. CYCLOPTERIDÆ. The Lump Suckers.

Genus 766. CYCLOPTERUS (Artedi) Linnæus.

Cyclopterus Linnæus, Syst. Nat., ed. X, I, 260, 1758 (*lumpus*).

2433. Cyclopterus lumpus Linnæus. *Lumpfish; Cock and Hen Paddle; Lump Sucker.*

North Atlantic; rocky shores of both coasts, south to Cape Cod and France.

Cyclopterus lumpus Linnæus, Syst. Nat., ed. XI, I, 260, 1766, Baltic and North Sea.

Genus 767. EUMICROTREMUS Gill.

Eumicrotremus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 190 (*spinosus*).

2434. Eumicrotremus spinosus (Müller).

North Atlantic and Arctic oceans, south to Maine and Denmark; Eastport, Maine.

Cyclopterus spinosus Müller, Prodr. Zool. Dan., IX, 1777, Denmark.

2435. Eumicrotremus orbis (Günther).

Aleutian Islands.

Cyclopterus orbis Günther, Cat., III, 158, 1861, Vancouver Island.

Genus 768. LETHOTREMUS Gilbert.

Lethotremus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 449 (*muticus*).

2436. Lethotremus muticus Gilbert.

Aleutian Islands, near Unimak Pass, Alaska.

Lethotremus muticus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 449, pl. 31, Unimak Pass, Alaska, at Albatross Stations 3223 and 3258, in 56 to 70 fathoms.

2437. Lethotremus vinolentus Jordan & Starks.

Puget Sound, Washington.

Lethotremus vinolentus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 827, pl. 94, Puget Sound, near Seattle, Washington.

Genus 769. CYCLOPTEROIDES Garman.

Cyclopteroides Garman, Mon. Discoboli, 37, 1892 (*gyrinops*).

2438. Cyclopteroides gyrinops Garman.

St. Paul Island, Alaska.

Cyclopteroides gyrinops Garman, Mon. Discoboli, in Memoirs Mus. Comp. Zool., 37, 1892, St. Paul Island.

Genus 770. CYCLOPTERICHTHYS Steindachner.

Cyclopterichthys Steindachner, Ichth. Beitr., x, 14, 1881 (*glaber* = *ventricosus*).

2439. Cyclopterichthys ventricosus (Pallas).

Kamchatka; Sea of Okhotsk.

Cyclopterus ventricosus Pallas, Spicilegia Zoo., VII, 15, t. 2, 1770, no locality given, somewhere about Kamchatka.

Genus 771. LIPAROPS Garman.

Liparops Garman, Discoboli, 42, 1892 (*stelleri*).

2440. Liparops stelleri Pallas.

Peter and Paul Harbor, Kamchatka.

Liparops stelleri Pallas, in Garman, Discoboli, 42, 1892, Peter and Paul Harbor, Kamchatka.

Family CLXXXIV. LIPARIDIDÆ. The Sea Snails.

Genus 772. NEOLIPARIS Steindachner.

Neoliparis Steindachner, Ichth. Beitr., III, 54, 1875 (*mucosus*).

2441. Neoliparis montagui (Donovan).

North Atlantic, on both coasts, south to Connecticut.

Cyclopterus montagui Donovan, Brit. Fishes, III, pl. 68, 1805, England; after *Montdgue's Sucker*.

2442. Neoliparis callyodon (Pallas).

Coasts of Alaska, north to Kamchatka and Bering Sea; recorded from St. Paul, Kamchatka, Plover Bay, Siberia, Unalaska, and Kadiak.

Cyclopterus callyodon Pallas, Zoogr. Rosso-Asiat., III, 75, 1811, Kamchatka and Aleutian Islands.

2443. Neoliparis mucosus (Ayres).

Coast of California.

Liparis mucosus Ayres, Proc. Cal. Ac. Sci., I, 1855, 24, San Francisco.

2444. Neoliparis floræ Jordan & Starks.

Pacific Coast, Puget Sound to Monterey.

Neoliparis floræ Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 830, pl. 96, fig. 1, Waadda Island, Straits of Juan de Fuca.

2445. Neoliparis greeni Jordan & Starks.

Puget Sound, at Victoria, British Columbia.

Liparis greeni Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 829, pl. 96, figs. 2 and 3, Victoria, British Columbia.

Aplocyclus Pylaie

Neoliparis atlanticus (not montagui)
coast of me.

Neoliparis putteri. Gilbert & Snyder
Kodiak

Neoliparis fasciatus Starks
Puget Sound.

Liparis herschelianus Sezpell
(near trinicates)

Genus 773. LIPARIS (Artedi) Scopoli. *Sea Snails.*

Liparis (Artedi) Scopoli, Introd. Hist. Nat., 453, 1777 (*liparis*).

Subgenus LIPARIS (Artedi) Scopoli.

2446. Liparis liparis (Cuvier). *Sea Snail.*

North Atlantic, on both shores, south to Connecticut and France.

Cyclopterus liparis Linnæus, Syst. Nat., ed. 12, I, 414, 1766, Northern Ocean; after Artedi and Gronow.

2447. Liparis cyclopus Günther.

Aleutian Islands to Puget Sound.

Liparis cyclopus Günther, Cat., III, 162, 1861, Esquimault Harbor, Vancouver Island.

2448. Liparis fucensis Gilbert.

Straits of Fuca.

Liparis fucensis Gilbert, Proc. Cal. Ac. Sci. 1895, 837, and Rept. U. S. Fish Com. 1893 (1896), 447, Port Angeles, Straits of Juan de Fuca.

2449. Liparis tunicata Reinhardt.

Coast of Greenland.

Liparis tunicata Reinhardt, Övers. Kong. Danske Vidensk. Selsk., VI, CXI, 1836, Greenland.

2450. Liparis agassizii Putnam.

Bristol Bay.

Liparis agassizii Putnam, Proc. Amer. Assoc. Adv. Sci. 1874, 339, Sakhalin Channel of Tartary.

2451. Liparis dennyi Jordan & Starks.

North Pacific, from Aleutian Islands south to Puget Sound.

Liparis dennyi Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 835, pl. 98, Admiralty Inlet, near Seattle.

2452. Liparis cyclostigma Gilbert.

Bristol Bay, Alaska.

Liparis cyclostigma Gilbert, Rept. U. S. Fish Com. 1893 (1896), 446, Bristol Bay, Alaska, at Albatross Station 3252, in 29¼ fathoms.

Subgenus LYOLIPARIS* Jordan & Evermann.

Lyoliparis Jordan & Evermann, new subgenus (*pulchellus*).

2453. Liparis pulchellus Ayres.

Point Reyes, California; northern Pacific, Alaska to Monterey.

Liparis pulchellus Ayres, Proc. Cal. Ac. Sci., I, 1855, 23, San Francisco.

Subgenus ACTINOCHIR Gill.

Actinochir Gill, Proc. Ac. Nat. Sci. Phila. 1864, 193 (*major*).

2454. Liparis major (Gill).

Coasts of Greenland.

Actinochir major Gill, Proc. Ac. Nat. Sci. Phila. 1864, 193, Greenland.

Genus 774. BATHYPHASMA Gilbert.

Bathyphasma Gilbert, Rept. U. S. Fish Com. 1893 (1896), 448 (*ovigerum*).

2455. Bathyphasma ovigerum Gilbert.

Off Queen Charlotte Island, British Columbia.

Bathyphasma ovigerum Gilbert, Rept. U. S. Fish Com. 1893 (1896), 448, Queen Charlotte Island, at Albatross Station 3342, in 1,588 fathoms.

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* Distinguished from *Careliparis* by the greater number of vertebræ, and from *Actinochir* by the depressed cranium.

Genus 775. CAREPROCTUS Kroyer.

Careproctus Kroyer, Naturh. Tidskr., I, 257, 1862 (*reinhardti*).

Subgenus CAREMITRA* Jordan & Evermann.

Caremitra Jordan & Evermann, new subgenus (*simus*).

2456. Careproctus simus Gilbert.

Off Unalaska Island.

Careproctus simus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 444, off Unalaska, at Albatross Station 3331, in 350 fathoms.

Subgenus CAREPROCTUS Kroyer.

2457. Careproctus colletti Gilbert.

South of Alaska Peninsula.

Careproctus colletti Gilbert, Rept. U. S. Fish Com. 1893 (1896), 442, south of Alaska Peninsula, at Albatross Station 3338, in 625 fathoms.

2458. Careproctus phasma Gilbert.

Bristol Bay, Alaska.

Careproctus phasma Gilbert, Rept. U. S. Fish Com. 1893 (1896), 443, Bristol Bay, Alaska, at Albatross Stations 3254 and 3256, in 46 and 49 fathoms.

2459. Careproctus spectrum Bean.

Between Unga and Nagai islands, Alaska.

Careproctus spectrum Bean, Proc. U. S. Nat. Mus. 1890, 40, between Unga and Nagai islands, 160° 18′ W., 55° 10′ N., at Albatross Station 2848, in 110 fathoms.

2460. Careproctus reinhardti (Kroyer).

Greenland, Jan Mayen, and Beeren Island.

Liparis (*Careproctus*) *reinhardti* Kroyer, Naturh. Tidskr., I, 252, 1862, Greenland.

2461. Careproctus ranula (Goode & Bean).

Off Halifax Harbor.

Liparis ranula Goode & Bean, Proc. U. S. Nat. Mus. 1880, 46, Halifax.

2462. Careproctus ostentum Gilbert.

Unalaska Island.

Careproctus ostentum Gilbert, Rept. U. S. Fish Com. 1893 (1896), 444, north of Unalaska Island, at Albatross Stations 3324 and 3331, in 109 and 350 fathoms.

2463. Careproctus gelatinosus (Pallas).

Peter and Paul Harbor, Kamchatka.

Cyclopterus gelatinosus Pallas, Spicilegia, VII, 19, 1769, Peter and Paul Harbor, Kamchatka.

Subgenus ALLOCHIR† Jordan & Evermann.

Allochir Jordan & Evermann, new subgenus (*melanurus*).

2464. Careproctus melanurus Gilbert.

Off coast of California and Oregon.

Careproctus melanurus Gilbert, Proc. U. S. Nat. Mus. 1891, 560, off coasts of California and Oregon, at Albatross Stations 2840, 2891, and others, in 178 to 339 fathoms.

Subgenus ALLURUS‡ Jordan & Evermann.

Allurus Jordan & Evermann, new subgenus (*ectenes*).

2465. Careproctus ectenes Gilbert.

Unalaska Island.

Careproctus ectenes Gilbert, Rept. U. S. Fish Com. 1893 (1896), 442, north of Unalaska, at Albatross Station 3331, in 350 fathoms.

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* Distinguished by the short, deep body and blunt head.
† Distinguished by the entire pectoral fins, without trace of notch.
‡ Distinguished by the excessively elongate body and depressed snout.

Carcinoscorpius longifilis Burman
Science. April 1. 1892. 187. name only
deep water. off Central America.

Carcinoscorpius cyphocaudus J. & S. Abbott

Paraliparis frontalis Gurman
-18. Science. April 1. 1942.
name only. Dep. with 90 C.A.

Genus 776. GYRINICHTHYS Gilbert.

Gyrinichthys Gilbert, Rept. U. S. Fish Com. (1893) 1896, 444 (*minytremus*).

2466. Gyrinichthys minytremus Gilbert.

Off Unalaska Island.

Gyrinichthys minytremus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 444, north of Unalaska, at Albatross Station 3331, in 350 fathoms.

Genus 777. AMITRA Goode.

Amitra Goode, Proc. U. S. Nat. Mus. 1880, 478 (*liparina*).

2467. Amitra liparina Goode.

Atlantic Ocean, off Rhode Island.

Amitra liparina Goode, Proc. U. S. Nat. Mus. 1880, 478, off Rhode Island.

Genus 778. PARALIPARIS Collett.

Paraliparis Collett, Vid. Selsk. Forsk. Christiania, 14, 32, 1878 (*bathybii*).

Subgenus PARALIPARIS Collett.

2468. Paraliparis holomelas Gilbert.

North of Unalaska Island.

Paraliparis holomelas Gilbert, Rept. U. S. Fish Com. 1893 (1896), 441, north of Unalaska, at Albatross Stations 3308 and 3332, in 406 and 1,625 fathoms.

Subgenus AMITRICHTHYS* Jordan & Evermann.

Amitrichthys Jordan & Evermann, new subgenus (*cephalus*).

2469. Paraliparis cephalus Gilbert.

Alaska to California.

Paraliparis cephalus Gilbert, Proc. U. S. Nat. Mus. 1891, 561, off California and Oregon, at Albatross Station 2919, in 984 fathoms.

2470. Paraliparis rosaceus Gilbert.

Coast of Mexico.

Paraliparis rosaceus Gilbert, Proc. U. S. N. M. 1890, 93, west coast of Mexico, at Albatross Stations 2898, 2935, and others, in 61 to 158 fathoms.

2471. Paraliparis mento Gilbert.

Coast of Oregon.

Paraliparis mento Gilbert, Proc. U. S. Nat. Mus. 1891, 562, off coast of Oregon, at Albatross Station 3071, in 685 fathoms.

2472. Paraliparis copei Goode & Bean.

Gulf Stream.

Paraliparis copei Goode & Bean, Ocean. Ichth., 279, fig. 253, 1896, Gulf Stream, at Albatross Station 2232, 39° 12′ 17″ N., 72° 9′ 30″ W., in 520 fathoms.

2473. Paraliparis dactylosus Gilbert.

Off Santa Cruz, California.

Paraliparis dactylosus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 469, pl. 34, fig. 2, off Santa Cruz, California, at Albatross Station 3112, in 296 fathoms.

Subgenus HILGENDORFIA Goode & Bean.

Hilgendorfia Goode & Bean, Oceanic Ichth., 280, 1896 (*membranacea*).

2474. Paraliparis ulochir Gilbert.

Gulf of California and Unalaska.

Paraliparis ulochir Gilbert, Rept. U. S. Fish Com. 1893 (1896), 441, Gulf of California, at Albatross Station 3010, in 1,005 fathoms.

Genus 779. RHINOLIPARIS Gilbert.

Rhinoliparis Gilbert, Rept. U. S. Fish Com. 1893 (1896), 445 (*barbulifer*).

2475. Rhinoliparis barbulifer Gilbert.

Bering Sea.

Rhinoliparis barbulifer Gilbert, Rept. U. S. Fish Com. 1893 (1896), 445, north of Unalaska, Alaska, at Albatross Stations 3227, 3325, and others, in 225 to 576 fathoms.

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* *Distinguished by the very small gill-openings, above pectorals.*

Group GOBIOIDEI. The Gobies.

Family CLXXXV. CALLIONYMIDÆ. The Dragonets.

Genus 780. CALLIONYMUS Linnæus.

Callionymus Linnæus, Syst. Nat., ed. x, 249, 1758 (*lyra*).

2476. Callionymus bairdi Jordan.

"Snapper Banks," between Pensacola and Tampa, Florida.

Callionymus bairdi Jordan, Proc. U. S. Nat. Mus. 1887, 501, Snapper Banks, off Pensacola, Florida.

2477. Callionymus himantophorus Goode & Bean.

Off Barbados; off Santa Cruz.

Callionymus himantophorus Goode & Bean, Oceanic Ichth., 296, figs. 268 A and B, 1896, off Barbados, in 209 fathoms.

2478. Callionymus calliurus Eigenmann & Eigenmann.

Key West, Florida.

Callionymus calliurus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 76, South Beach, Key West.

2479. Callionymus pauciradiatus Gill.

Mantanzas, Cuba.

Callionymus pauciradiatus Gill, Ann. Lyc. Nat. Hist. N. Y., VIII, 1865, 143, Mantanzas, Cuba.

Family CLXXXVI. GOBIIDÆ. The Gobies.

Genus 781. IOGLOSSUS Bean.

Ioglossus Bean, in Jordan and Gilbert, Proc. U. S. N. M. 1892, 297 (*calliurus*).

2480. Ioglossus calliurus Bean.

Gulf of Mexico; Snapper Banks, off Pensacola, Florida.

Ioglossus calliurus Bean, in Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 297, Pensacola, Florida.

Genus 782. PHILYPNUS Cuvier & Valenciennes.

Philypnus Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 255, 1837 (*dormitor*).

2481. Philypnus dormitor (Lacépède). *Sleeper; Guavina.*

Streams of the West Indies and Atlantic shores of Central America, Mexico and Surinam.

Gobiomorus dormitor Lacépède, Hist. Nat. Poiss., II, 599, 1798, Martinique; from a drawing by Plumier.

2482. Philypnus lateralis Gill. *Aboma de Mar.*

Streams of Pacific Coast of Mexico and Central America, from Sonora to Panama.

Philypnus lateralis Gill, Proc. Ac. Nat. Sci. Phila. 1860, 123, Cape San Lucas.

Genus 783. DORMITATOR Gill.

Dormitator Gill, Proc. Ac. Nat. Sci. Phila. 1862, 240 (*gundlachi*).

2483. Dormitator maculatus (Bloch). *Guarina-Mapo; Paneca.*

Both coasts of America, ranging from South Carolina through the West Indies to Pará, Cape San Lucas, and Panama.

Sciæna maculata Bloch, Ichth., pl. 299, fig. 2, 1790, West Indies.

Genus 784. GUAVINA Bleeker.

Guarina Bleeker, Esquisse d'un Syst. Nat. Gobioid., 302, 1874 (*guarina*).

2484. Guavina guavina (Cuvier & Valenciennes). *Guarubaco; Guarina.*

East coast of tropical America, Cuba to Rio Janeiro.

Eleotris guarina Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 223, 1837, Martinique.

Calliempnus nsp. Germanus

Genus 785. ELEOTRIS Bloch & Schneider.

Eleotris Bloch & Schneider, Syst. Ichth., 65, 1801 (*pisonis*).

2485. Eleotris amblyopsis (Cope).

Atlantic Coast of America, from Charleston, South Carolina, to Surinam; streams of West Indies.

Eleotris amblyopsis Cope, Trans. Amer. Philos. Soc. 1870, 473, Surinam.

2486. Eleotris abacurus Jordan & Gilbert.

Coast of South Carolina.

Eleotris abacurus Jordan & Gilbert, Proc. Cal. Ac. Sci. 1896, 228, Charleston, South Carolina.

2487. Eleotris pisonis (Gmelin). *Guavina; Tetard; Sleeper.*

Rio Almendares, Cuba.

Gobius pisonis Gmelin, Syst. Nat., 106, 1788, Rio Almendares, Cuba (based on *Eleotris* of Gronow).

2488. Eleotris perniger (Cope).

West Indies, south to Rio Janeiro.

Culius perniger Cope, Trans. Amer. Philos. Soc. 1870, 473, St. Martins.

2489. Eleotris pictus Kner & Steindachner. *Guarina.*

Streams about the Gulf of California, from Sonora south to Panama; Rio Presidio.

Eleotris pictus Kner & Steindachner, Abh. Ak. Wiss. Wien, 1864, 18, pl. 3, fig. 1, Rio Bayano, near Panama.

Genus 786. ALEXURUS Jordan.

Alexurus Jordan, Proc. Cal. Ac. Sci. 1895, 511 (*armiger*).

2490. Alexurus armiger Jordan.

La Paz, Baja California.

Alexurus armiger Jordan & Richardson, in Jordan, Proc. Cal. Ac. Sci. 1895, 511, pl. 48, La Paz, Lower California.

Genus 787. EROTELIS Poey. *Esmeraldes de Mar.*

Erotelis Poey, Memorias, II, 273, 1861 (*valenciennesi*=*smaragdus*).

2491. Erotelis smaragdus (Cuvier & Valenciennes). *Esmeralda Negra; Esmeralda de Mar.*

Key West and Cuba; coral shores among algæ.

Eleotris smaragdus Cuv. & Val., Hist. Nat. Poiss., XII, 231, 1837, Cuba.

Genus 788. GYMNELEOTRIS Bleeker.

Gymneleotris Bleeker, Esqu. d'un Syst. Nat. des Gobi., 304, 1874 (*seminuda*).

2492. Gymneleotris seminuda (Günther). Is this Jamaicensis?

Panama.

Eleotris seminuda Günther, Proc. Zool. Soc. Lond. 1864, 24, pl. 4, figs. 2, 2*a*, Panama.

Genus 789. CHRIOLEPIS Gilbert.

Chriolepis Gilbert, Proc. U. S. Nat. Mus. 1891, 557 (*minutillus*).

2493. Chriolepis minutillus Gilbert.

Gulf of California.

Chriolepis minutillus Gilbert, Proc. U. S. Nat. Mus. 1891, 558, Gulf of California, at Albatross Station 2825.

Genus 790. SICYDIUM Cuvier & Valenciennes.

Sicydium Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 168, 1837 (*plumieri*).

2494. Sicydium plumieri (Bloch). *Sirago.*

Fresh waters of the West Indies.

Gobius plumieri Bloch, Ichth., 125, pl. 178, fig. 3, 1786, Martinique; on a drawing by Plumier.

2495. Sicydium antillarum Ogilvie-Grant.

Barbados.

Sicydium antillarum Ogilvie-Grant, Proc. Zool. Soc. Lond. 1884, 157, Barbados.

2496. Sicydium vincente Jordan & Evermann.

Kingston, St. Vincent Island; Haiti.

Sicydium vincente Jordan & Evermann, Fishes North and Middle America, 1896, St. Vincent Island.

Genus 791. COTYLOPUS Guichenot.

Cotylopus Guichenot, in Maillard, Notes sur l'Isle de la Réunion, II, Addendum, 9, 1864 (*acutipinnis*).

Subgenus SICYA Jordan & Evermann.

Sicya Jordan & Evermann, Fishes N. and M. Amer., 1896 (*gymnogaster*).

2497. Cotylopus gymnogaster (Ogilvie-Grant).

Streams about Mazatlan, Mexico.

Sicydium gymnogaster Ogilvie-Grant, Proc. Zool. Soc. Lond. 1884, 158, pl. 11, fig. 2, and pl. 12, fig. 6, Mazatlan, Mexico.

2498. Cotylopus salvini (Ogilvie-Grant).

Streams near Panama.

Sicydium salvini Ogilvie-Grant, Proc. Zool. Soc. Lond. 1884, 159, pl. 12, fig. 2, Panama.

Genus 792. EVORTHODUS Gill.

Evorthodus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 195 (*breviceps*).

2499. Evorthodus breviceps Gill.

Trinidad and Surinam.

Evorthodus breviceps Gill, Proc. Ac. Nat. Sci. Phila. 1859, 195, Trinidad.

Genus 793. LOPHOGOBIUS Gill. *Crested Gobies.*

Lophogobius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 240 (*cristagalli* = *cyprinoides*).

2500. Lophogobius cyprinoides (Pallas).

West Indies; Cuba.

Gobius cyprinoides Pallas, Spic., Zool., VIII, 17, pl. 1, fig. 5, 1770, "Amboina."

Genus 794. GOBIUS (Artedi) Linnæus.

Gobius (Artedi) Linnæus, Syst. Nat., ed. x, 262, 1758 (*niger*).

Subgenus GOBIUS (Artedi) Linnæus.

2501. Gobius soporator Cuvier & Valenciennes. *Sleeper; Mapo; Caiman.*

Panama, Barbados, Pará, Itapuana, Cuba, Galapagos, Sambara, Bahamas, Orange Key, Bahia, Pernambuco, St. Thomas, Tortugas, Florida Keys, Martinique, Sao Matheas, Curuca, Rio de Janeiro, Rio Doce.

Gobius soporator Cuv. & Val., Hist. Nat. Poiss., XII, 56, 1837, Martinique.

Subgenus CTENOGOBIUS Gill.

Ctenogobius Gill, Ann. Lyc. Nat. Hist. N. Y., VI, 1858, 374, 430 (*fasciatus*).

2502. Gobius nicholsi Bean.

Coast of British Columbia.

Gobius nicholsi Bean, Proc. U. S. Nat. Mus. 1881, 469, Departure Bay, British Columbia.

2503. Gobius glaucofrænum (Gill).

Florida Keys; Tortugas (?); Washington (?).

Coryphopterus glaucofrænum Gill, Proc. Ac. Nat. Sci. Phila. 1863, 263, coast of Washington; evidently an error.

2504. Gobius manglicola Jordan & Starks.

Pacific Coast of Mexico at Mazatlan.

Gobius manglicola Jordan & Starks, in Jordan, Proc. Cal. Ac. Sci. 1895, 495, Mazatlan, Mexico.

2505. Gobius stigmaturus Goode & Bean.

Florida Keys.

Gobius stigmaturus Goode & Bean, Proc. U. S. Nat. Mus. 1882, 418, no type locality given, but specimens probably from Florida Keys.

Robinia engelmannii. Garman
Bull. Iowa,
96, 88

Key West.
(near Smarogisus)

2506. Gobius quadriporus Cuvier & Valenciennes.
Surinam.
Gobius quadriporus Cuv. & Val., Hist. Nat. Poiss., XII, 87, 1837, Surinam.

2507. Gobius shufeldti Jordan & Eigenmann.
Gulf Coast of United States.
Gobius shufeldti Jordan & Eigenmann, Proc. U. S. Nat. Mus. 1886, 495, New Orleans.

2508. Gobius boleosoma Jordan & Gilbert.
Gulf of Mexico, Pensacola to Key West.
Gobius boleosoma Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 295, Laguna Grande, Pensacola.

2509. Gobius fasciatus (Gill).
West Indies.
Ctenogobius fasciatus Gill, Ann. Lyc. Nat. Hist. N. Y., VI, 1858, 376, Trinidad.

2510. Gobius encæomus Jordan & Gilbert.
South Carolina to Key West.
Gobius encæomus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 611, Charleston, South Carolina.

2511. Gobius stigmaticus (Poey).
Coast of North Carolina, Florida Keys, West Indies, southward to Rio Janeiro; common at Havana.
Smaragdus stigmaticus Poey, Memorias, II, 281, 1861, Cuba.

2512. Gobius lyricus Girard.
Gulf of Mexico, from Galveston to Cuba and the Lesser Antilles.
Gobius lyricus Girard, Proc. Ac. Nat. Sci. Phila. 1858, 169, Brazos Santiago, Texas.

2513. Gobius garmani Eigenmann & Eigenmann.
Dominica; Fort de France; Martinique; St. Kitts.
Gobius garmani Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 61, Dominica, Fort de France, Martinique, and St. Kitts.

2514. Gobius zebra Gilbert.
West coast of Mexico.
Gobius zebra Gilbert, Proc. U. S. Nat. Mus. 1890, 73, west coast of Mexico.

Subgenus EUCTENOGOBIUS Gill.
Euctenogobius Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1859, 45 (*badius*).

2515. Gobius poeyi Steindachner.
Barbados.
Gobius poeyi Steindachner, Ichth. Notizen, VI, 44, 1867, Barbados.

2516. Gobius badius (Gill).
Mouth of Amazon.
Euctenogobius badius Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1859, 47, Amazon.

Subgenus GOBIONELLUS Girard.
Gobionellus Girard, Proc. Ac. Nat. Sci. Phila. 1858, 168 (*hastatus*).

2517. Gobius microdon Gilbert.
San Juan Lagoon, west coast of Mexico.
Gobius microdon Gilbert, Proc. U. S. Nat. Mus. 1891, 554, San Juan Lagoon, north of Rio Ahomè, Mexico.

2518. Gobius smaragdus Cuvier & Valenciennes. *Esmeralda.*
West Indies, south to Rio Janeiro, north to St. Augustine, Florida, and to Charleston.
Gobius smaragdus Cuv. & Val., Hist. Nat. Poiss., XII, 120, 1837, Cuba.

2519. Gobius strigatus (O'Shaughnessy).
Coast of Surinam.
Euctenogobius strigatus O'Shaughnessy, Ann. Mag. Nat. Hist., 15, 1875, 145, Nagasaki, Japan.

0. **Gobius sagittula** (Günther).
Gulf of California, south to Panama.
Euctenogobius sagittula Günther, Proc. Zool. Soc. Lond. 1861, 3, west coast of Central America.

2521. Gobius hastatus Girard. *Emerald-fish; Sharp-tailed Goby.*
Gulf of Mexico.
Gobionellus hastatus Girard, Proc. Ac. Nat. Sci. Phila. 1858, 168, St. Joseph Island, Texas.

2522. Gobius oceanicus Pallas. *Esmeralda; Endormi; Emerande; Bacalhao Sabara.*
Gulf Coast of United States, southward through the West Indies.
Gobius oceanicus Pallas, Spicilegia, VIII, 4, 1769, locality unknown; after Gronow.

Subgenus LYTHRYPNUS Jordan & Evermann.
Lythrypnus Jordan & Evermann, new subgenus (*dalli*).

Gobius dalli Gilbert.
Catalina Harbor, California.
Gobius dalli Gilbert, Proc. U. S. Nat. Mus. 1890, 73, Catalina Harbor, California, in 35 fathoms.

Genus 795. GARMANNIA Jordan & Evermann. *Half-naked Gobies.*
Garmannia Jordan & Evermann, Proc. Cal. Ac. Sci. 1895, 495, pl. 49 (*paradoxus*).

2524. Garmannia paradoxa (Günther).
Pacific Coast of Mexico, Mazatlan to Panama.
Gobius paradoxus Günther, Proc. Zool. Soc. Lond. 1861, 3, west coast of Central America.

nnia hemigymna (Eigenmann & Eigenmann).
Indies.
us hemigymnus Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 66, dredged in the West Indies.

5. **Garmannia seminuda** (Günther).
West coast of Central America.
Gobius seminudus Günther, Proc. Zool. Soc. Lond. 1861, 3, west Central America.

Genus 796. RHINOGOBIUS Gill.
Rhinogobius Gill, Proc. Acad. Nat. Sc. Phila. 1859, 145 (*similis*).

2527. Rhinogobius flavus (Cuvier & Valenciennes).
Rivers of Surinam and Brazil, south to Bahia.
Gobius flavus Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 60, 1837, Surinam.

2528. Rhinogobius taiasica (Lichtenstein).
West Indies, both coasts of Mexico, south to Brazil; common in Cuba, in Sinaloa, and about La Paz, in Lower California, thence southward to Panama.
Gobius taiasica Lichtenstein, Berl. Abhandl., 273, 1822 (not *Tajasica* Marcgrave), Brazil.

2529. Rhinogobius mexicanus (Günther).
Fresh-water streams of eastern slope of Mexico.
Gobius mexicanus Günther, Cat., III, 61, 1861, Mexico.

Genus 797. BOLLMANNIA Jordan.
Bollmannia Jordan, Proc. U. S. Nat. Mus. 1889, 164 (*chlamydes*).

2530. Bollmannia ocellata Gilbert.
Gulf of California.
Bollmannia ocellata Gilbert, Proc. U. S. Nat. Mus. 1891, 555, northern part of Gulf of California at Albatross Stations 3031 and 3035, in 30 and 33 fathoms.

2531. Bollmannia chlamydes Jordan.
Pacific Ocean, off coast of Colombia.
Bollmannia chlamydes Jordan, Proc. U. S. Nat. Mus. 1889, 164, off coast of Colombia, at Albatross Stations 2800 and 2805, in 51½ fathoms.

Garmannia rubra Rosen,
Andros. Lund mus.

Is not Symplectris also Garmannia?
V. said to be ~~spot~~ separate.
but only split,
Pycnoumia may be same.

2532. Bollmannia macropoma Gilbert.
Gulf of California, just north of La Paz Bay.
Bollmannia macropoma Gilbert, Proc. U. S. Nat. Mus. 1891, 556, near La Paz, Gulf of California, at Albatross Station 2996, in 112 fathoms.

2533. Bollmannia stigmatura Gilbert.
Northern part of the Gulf of California.
Bollmannia stigmatura Gilbert, Proc. U. S. Nat. Mus. 1891, 556, Gulf of California, at Albatross Stations 3016 and 3017, in 76 and 58 fathoms.

Genus 798. ABOMA Jordan & Starks.
Aboma Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 497 (*etheostoma*).

2534. Aboma etheostoma Jordan & Starks.
Pacific Coast of Mexico.
Aboma etheostoma Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 498, pl. 50, Mazatlan, Mexico.

2535. Aboma lucretiæ (Eigenmann & Eigenmann).
Pearl Island, Gulf of Panama.
Gobius lucretiæ Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 57, Pearl Island, Gulf of Panama.

2536. Aboma chiquita (Jenkins & Evermann).
Gulf of California.
Gobius chiquita Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 146, Guaymas, Sonora.

Genus 799. MICROGOBIUS Poey.
Microgobius Poey, Enumeratio, 127, 1875 (*signatus*).

2537. Microgobius gulosus (Girard).
Coast of Florida to Texas, common north to Indian River.
Gobius gulosus Girard, Proc. Ac. Nat. Sci. Phila. 1858, 169, Indianola, Texas.

2538. Microgobius eulepis Eigenmann & Eigenmann.
Fortress Monroe, Virginia.
Microgobius eulepis Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 69, Fortress Monroe, Virginia.

2539. Microgobius thalassinus Jordan & Gilbert.
Charleston Harbor.
Gobius thalassinus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 612, Charleston Harbor, South Carolina.

2540. Microgobius signatus Poey.
West Indies; common in Cuba.
Microgobius signatus Poey, Enumeratio, 127, pl. 5, fig. 3, 1875, Cuba.

Genus 800. ZALYPNUS * Jordan & Evermann.
Zalypnus Jordan & Evermann, new genus (*emblematicus*).

2541. Zalypnus cyclolepis (Gilbert).
Lower California.
Microgobius cyclolepis Gilbert, Proc. U. S. Nat. Mus. 1891, 74, Lower California.

2542. Zalypnus emblematicus (Jordan & Gilbert).
Panama.
Gobius emblematicus Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 330, Bay of Panama.

Genus 801. EUCYCLOGOBIUS Gill.
Eucyclogobius Gill, Proc. Ac. Nat. Sci. Phila. 1862, 279 (*newberryi*).

2543. Eucyclogobius newberryi (Girard).
Streams of California, in small brooks near the sea; locally common in San Luis Obispo Creek.
Gobius newberryi Girard, Proc. Ac. Nat. Sci. Phila. 1856, 136, Tomales Bay.

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* Distinguished from Microgobius by its half-naked body.

Genus 802. LEPIDOGOBIUS Gill.

Lepidogobius Gill, Ann. Lyc. Nat. Hist. N. Y., VII, 1859, 14 (*lepidus*).

2544. Lepidogobius lepidus (Girard).

Pacific Coast of North America, from Vancouver Island to Lower California; rather deep water off San Francisco Bay.
Gobius gracilis Girard, Proc. Ac. Nat. Sci. Phila. 1854, San Francisco.

Genus 803. GILLICHTHYS Cooper.

Gillichthys Cooper, Proc. Cal. Ac. Sci. 1863, 109 (*mirabilis*).

5. Gillichthys mirabilis Cooper. *Long-jawed Goby.*

Pacific Coast of North America, from San Francisco to Guaymas.
Gillichthys mirabilis Cooper, Proc. Cal. Ac. Sci. 1863, 109, San Diego Bay.

Gillichthys detrusus Gilbert & Scofield.

Horseshoe Bend, near mouth of Colorado River, in Mexico.
Gillichthys detrusus Gilbert & Scofield MS., 1896, near mouth of Colorado River.

Genus 804. QUIETULA Jordan & Evermann.

Quietula Jordan & Evermann, Proc. Cal. Ac. Sci. 1895, 839 (*y-cauda*).

2547. Quietula y-cauda (Jenkins & Evermann).

Pacific Coast of North America, from Guaymas to Vancouver Island.
Gillichthys y-cauda Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 147, Guaymas, Sonora.

Genus 805. ILYPNUS* Jordan & Evermann.

Ilypnus Jordan & Evermann, Fishes N. and M. Amer., 1896 (*gilberti*).

2548. Ilypnus gilberti (Eigenmann & Eigenmann).

San Diego Bay and southward; abundant at Magdalena Bay, Conception Bay, and St. Georges Bay in the Gulf of California.
Lepidogobius gilberti Eigenmann & Eigenmann, Proc. U. S. Nat. Mus. 1888, 464, San Diego Bay, California.

Genus 806. CLEVELANDIA Eigenmann & Eigenmann.

Clevelandia Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 73 (*longipinnis* = *rosæ*).

2549. Clevelandia ios (Jordan & Gilbert).

Puget Sound and neighboring waters.
Gobiosoma ios Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 437, Saanich Arm, Vancouver Island.

2550. Clevelandia rosæ Jordan & Evermann.

San Diego Bay.
Clevelandia rosæ Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 229, San Diego; after *Clevelandia longipinnis* Eigenmann & Eigenmann, not Steindachner.

Genus 807. EVERMANNIA Jordan.

Evermannia Jordan, Proc. Cal. Ac. Sci., IV, series 2, 1895, 592 (*zosterura*).

2551. Evermannia longipinnis (Steindachner).

Gulf of California.
Gobiosoma longipinne Steindachner, Ichth. Beitr., VIII, 27, 1879, Los Animas Island, Gulf of California.

2552. Evermannia zosterura (Jordan & Gilbert).

Pacific Coast of Mexico at Mazatlan, Mexico.
Gobiosoma zosterurum Jordan & Gilbert, Proc. U. S. N. M. 1881, 361, Mazatlan.

Genus 808. GOBIOSOMA Girard.

Gobiosoma Girard, Proc. Ac. Nat. Sci. Phila. 1858, 169 (*alepidotus*).

2553. Gobiosoma histrio Jordan.

Known only from the Gulf of California, at Guaymas.
Gobiosoma histrio Jordan, Proc. U. S. Nat. Mus. 1884, 260, Guaymas, Mexico.

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* *Distinguished from Clevelandia* by the presence of flaps on the shoulder girdle.

2554. Gobiosoma molestum Girard.

Gulf Coast of United States, from Key West to Texas, and south to Bahia.
Gobiosoma molestum Girard, Proc. Ac. Nat. Sci. Phila. 1858, 169, Indianola, Texas.

2555. Gobiosoma bosci (Lacépède).

Atlantic Coast of United States, Cape Cod to Florida.
Gobius bosci Lacépède, Hist. Nat. Poiss., II, 555, pl. 16, fig. 1, 1798, Charleston, South Carolina.

2556. Gobiosoma crescentale Gilbert.

Gulf of California.
Gobiosoma crescentalis Gilbert, Proc. U. S. Nat. Mus. 1891, 557, Gulf of California, at Albatross Station 2825.

2557. Gobiosoma multifasciatum Steindachner.

West Indies; known from Cuba, St. Thomas, and the Lesser Antilles.
Gobiosoma multifasciatum Steindachner, Ichth. Beitr., V, 183, 1870, Lesser Antilles.

Genus 809. BARBULIFER Eigenmann & Eigenmann.

Barbulifer Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1888, 70 (*papillosus*).

2558. Barbulifer ceuthœcus (Jordan & Gilbert).

About Key West, Florida.
Gobiosoma ceuthœcum Jordan & Gilbert, Proc. U. S. N. M. 1884, 29, Key West, Florida.

Genus 810. TYPHLOGOBIUS Steindachner.

Typhlogobius Steindachner, Ichth. Beitr., VIII, 24, 1879 (*californiensis*).

2559. Typhlogobius californiensis Steindachner. *Blind Goby of Point Loma; Pinkfish.*

Coast of Lower California, from San Diego southward to Cerros Island; especially common at Point Loma.
Typhlogobius californiensis Steindachner, Ichth. Beitr., VIII, 24, 1879, False Bay, San Diego, California.

Genus 811. TYNTLASTES Günther.

Tyntlastes Günther, Proc. Zool. Soc. Lond. 1862, 193 (*sagitta*).

2560. Tyntlastes brevis (Günther).

Panama.
Amblyopus brevis Günther, Proc. Zool. Soc. Lond. 1864, 151, Panama.

2561. Tyntlastes sagitta (Günther).

Coast of Lower California.
Amblyopus sagitta Günther, Proc. Zool. Soc. Lond. 1862, 193, "California," probably from Lower California.

Genus 812. GOBIOIDES Lacépède.

Gobioides Lacépède, Hist. Nat. Poiss., II, 580, 1800 (*broussonnetii*).

2562. Gobioides broussonnetii Lacépède.

West Indies to Brazil; once taken near New Orleans.
Gobioides broussonnetii Lacépède, Hist. Nat. Poiss., II, 280, 1798, probably from Surinam, "Given by Holland to France."

2563. Gobioides peruanus (Steindachner).

Shores of Ecuador and Peru.
Amblyopus peruanus Steindachner, Fisch-Fauna des Caula und Flusse bei Guayaquil, 42, 1880, Guayaquil.

Genus 813. CAYENNIA Sauvage.

Cayennia Sauvage, Bull. Sci. Philom., series 7, IV, 1880, 57 (*guichenoti*).

2564. Cayennia guichenoti Sauvage.

Cayenne, French Guiana.
Cayennia guichenoti Sauvage, Bull. Soc. Philom., series 7, IV, 1880, 57, Cayenne.

Group TRACHINOIDEI. The Trachinoid Fishes.

Family CLXXXVII. MALACANTHIDÆ. The Blanquillos.

Genus 814. MALACANTHUS Cuvier.

Malacanthus Cuvier, Règne Animal, ed. 2, II, 205, 1829 (*plumieri*).

2565. Malacanthus plumieri (Bloch). *Matajuelo Blanco.*

West Indies.

Coryphæna plumieri Bloch, Ichth., v, 119, pl. 175, 1787, Martinique; from a drawing by Plumier.

Genus 815. CAULOLATILUS Gill.

Caulolatilus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 240 (*chrysops*).

2566. Caulolatilus princeps (Jenyns). *Blanquillo; Whitefish.*

Rocky islands of the Pacific Coast, from Monterey southward to the Galapagos; abundant about Santa Barbara Islands.

Latilus princeps Jenyns, Zool. Beagle, Fishes, 52, 1840, Chatham Island, Galapagos Archipelago.

2567. Caulolatilus microps Goode & Bean.

Gulf of Mexico.

Caulolatilus microps Goode & Bean, Proc. U. S. Nat. Mus. 1878, 43, off Pensacola, Florida.

2568. Caulolatilus cyanops Poey. *Blanquillo.*

Coast of Cuba.

Caulolatilus cyanops Poey, Repertorio, 311, 1867, Cuba.

Genus 816. LOPHOLATILUS Goode & Bean.

Lopholatilus Goode & Bean, Proc. U. S. Nat. Mus. 1879, 205 (*chamæleonticeps*).

2569. Lopholatilus chamæleonticeps Goode & Bean. *Tilefish.*

Deep waters of the western Atlantic.

***Lopholatilus chamæleonticeps* Goode & Bean, Proc. U. S. Nat. Mus. 1879, 205; 80 miles S. by E. of Noman's Land, 40° N., 70° W., in 84 fathoms.**

Family CLXXXVIII. OPISTHOGNATHIDÆ. The Jawfishes.

Genus 817. OPISTHOGNATHUS Cuvier.

Opisthognathus Cuvier, Règne Animal, ed. 2, II, 240, 1829 (*sonneratii*).

2570. Opisthognathus lonchurum Jordan & Gilbert.

Gulf of Mexico, in deep water; two specimens known, taken from the stomach of a red snapper at Pensacola, Florida.

Opisthognathus lonchurus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 290, Snapper Banks, off Pensacola, Florida.

2571. Opisthognathus punctatum Peters.

West Coast of Mexico, Mazatlan.

Opisthognathus punctata Peters, Berliner Monatsberichte, 1869, Mazatlan.

2572. Opisthognathus macrognathum Poey.

Florida Keys to Cuba.

Opisthognathus macrognathus Poey, Memorias, II, 284, 1860, Cuba.

2573. Opisthognathus ommatum Jenkins & Evermann.

Gulf of California at Bay of Guaymas.

Opisthognathus ommata Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 153, Guaymas, Sonora.

Genus 818. GNATHYPOPS Gill.

Gnathypops Gill, Proc. Ac. Nat. Sci. Phila. 1862, 241 (*maxillosus*).

2574. Gnathypops scops Jenkins & Evermann.

Gulf of California at Guaymas.

Gnathypops scops Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 152, Guaymas, Sonora.

Archeyppo Snyderi Jobberti Jorg.
San Luis Gonzales F.C.

2575. Gnathypops maxillosus (Poey).
Cuba, north to Garden Key, Florida.
Opisthognathus maxillosus Poey, Memorias, II, 286, 1860, Cuba.

2576. Gnathypops macrops (Poey).
Coast of Cuba.
Opisthognathus macrops Poey, Memorias, II, 287, 1860, coast of Cuba.

2577. Gnathypops cuvieri (Valenciennes).
Bahia.
Opisthognathus cuvieri Valenciennes, Hist. Nat. Poiss., XI, 504, 1836, Bahia.

2578. Gnathypops rhomaleus (Jordan & Gilbert).
Gulf of California.
Opisthognathus rhomaleus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 276, Santa Maria Cove, Lower California.

2579. Gnathypops mystacinus Jordan.
Gulf of Mexico; known from the Pensacola "Snapper Banks," from stomachs of red snappers (*Neomænis aya*).
Gnathypops mystacinus Jordan, Proc. U. S. Nat. Mus. 1884, 37, Snapper Banks, off Pensacola, Florida.

Genus 819. LONCHOPISTHUS Gill.
Lonchopisthus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 241 (*micrognathus*).

2580. Lonchopisthus micrognathus (Poey).
Cuba.
Opisthognathus micrognathus Poey, Memorias, II, 287, 1860, Cuba.

Family CLXXXIX. BATHYMASTERIDÆ.

Genus 820. BATHYMASTER Cope.
Bathymaster Cope, Proc. Amer. Philos. Soc. 1873, 31 (*signatus*).

2581. Bathymaster signatus Cope.
Shores of Alaska.
Bathymaster signatus Cope, Proc. Amer. Phil. Soc. 1873, 31, near Sitka, Alaska.

Genus 821. RONQUILUS Jordan & Starks.
Ronquilus Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 838 (*jordani*).

2582. Ronquilus jordani (Gilbert).
Alaska to Puget Sound.
Bathymaster jordani Gilbert, Proc. U. S. Nat. Mus. 1888, 554, Elliott Bay at Seattle; Alaska.

Genus 822. RATHBUNELLA Jordan & Evermann.
Rathbunella Jordan & Evermann, Fishes N. and M. Amer., 1896 (*hypoplectus*).

2583. Rathbunella hypoplecta (Gilbert).
Coast of California off the Santa Barbara Islands.
Bathymaster hypoplectus Gilbert, Proc. U. S. Nat. Mus. 1890, 97, coast of California, south of Point Conception, at Albatross Station 2944.

Family CXC. CHIASMODONTIDÆ. The Black Swallowers.

Genus 823. CHIASMODON Johnson.
Chiasmodon Johnson, Proc. Zool. Soc. Lond. 1863, 408 (*niger*).

2584. Chiasmodon niger Johnson.
Deep waters of the Atlantic; taken at Madeira and off Massachusetts coast.
Chiasmodon niger Johnson, Proc. Zool. Soc. Lond. 1863, 408, Madeira.

Genus 824. PSEUDOSCOPELUS Lütken.

Pseudoscopelus Lütken, Spolia Atlantica, Scopelini, 64, 1892 (*scriptus*).

2585. Pseudoscopelus scriptus Lütken.

Old Bahama Straits.

Pseudoscopelus scriptus Lütken, Spolia Atlantica, Scopelini, 64, 1892, Old Bahama Straits.

Family CXCI. CHÆNICHTHYIDÆ.

Genus 825. HYPSICOMETES Goode.

Hypsicometes Goode, Proc. U. S. Nat. Mus. 1880, 347 (*gobioides*).

2586. Hypsicometes gobioides Goode.

Gulf Stream.

Hypsicometes gobioides Goode, Proc. U. S. Nat. Mus. 1880, 348, Gulf Stream, at Albatross Station 871, 40° 2′ 54″ N., 70° 23′ 40″ W., in 115 fathoms.

Family CXCII. TRICHODONTIDÆ. The Sand-Fishes.

Genus 826. TRICHODON Steller.

Trichodon Steller, in Tilesius, Mém. Acad. St. Petersburg, iv, 1813, 468 (*trichodon*).

2587. Trichodon trichodon (Tilesius).

Herendeen Bay and elsewhere in Bering Sea, and south to coast of Oregon.

Trachinus trichodon Tilesius, Mém. Acad. St. Petersb. 1813, 466, Bering Sea.

Genus 827. ARCTOSCOPUS* Jordan & Evermann.

Arctoscopus Jordan & Evermann, new genus (*japonicus*).

2588. Arctoscopus japonicus (Steindachner).

Strietok, in the Sea of Japan, and Sitka, Alaska.

Trichodon japonicus Steindachner, Ichth. Beitr., x, 4, 1881, Strietok and Sitka.

Family CXCIII. DACTYLOSCOPIDÆ. The Sand Star-Gazers.

Genus 828. GILLELLUS Gilbert.

Gillellus Gilbert, Proc. U. S. Nat. Mus. 1890, 98 (*semicinctus*).

2589. Gillellus semicinctus Gilbert.

Gulf of California; also off the Florida coast.

Gillellus semicinctus Gilbert, Proc. U. S. N. M. 1890, 98, near mouth of Gulf of California, at Albatross Stations 2827, 24° 11′ 45″ N., 109° 55′ W., and 2829, 22° 52′ N., 109° 55′ W., in 10 and 31 fathoms.

2590. Gillellus arenicola Gilbert.

Cape San Lucas, Lower California.

Gillellus arenicola Gilbert, Proc. U. S. Nat. Mus. 1890, 99, Cape San Lucas.

2591. Gillellus ornatus Gilbert.

Gulf of California.

Gillellus ornatus Gilbert, Proc. U. S. Nat. Mus. 1891, 558, Gulf of California.

Genus 829. DACTYLOSCOPUS Gill.

Dactyloscopus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 132 (*tridigitatus*).

Subgenus DACTYLOSCOPUS Gill.

2592. Dactyloscopus pectoralis Gill.

Cape San Lucas, Lower California.

Dactyloscopus pectoralis Gill, Proc. Ac. Nat. Sci. Phila. 1861, 267, Cape San Lucas, Lower California.

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* Distinguished from *Trichodon* by the short spinous dorsal.

through Ireland.

2593. Dactyloscopus tridigitatus Gill.
West Indies, north to Key West.
Dactyloscopus tridigitatus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 132, Barbados.

2594. Dactyloscopus poeyi Gill.
Cuba.
Dactyloscopus poeyi Gill, Proc. Ac. Nat. Sci. Phila. 1861, 266, Cuba.

2595. Dactyloscopus lunaticus Gilbert.
Gulf of California.
Dactyloscopus lunaticus Gilbert, Proc. U. S. N. M. 1890, 99, Gulf of California.

Subgenus ESLOSCOPUS* Jordan & Evermann.
Esloscopus Jordan & Evermann, new subgenus (*zelotes*).

2596. Dactyloscopus zelotes Jordan & Gilbert.
Panama.
*Dactyloscopus zelotes** Jordan & Gilbert new species, Panama.

Genus 830. DACTYLAGNUS Gill.
Dactylagnus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 505 (*mundus*).

2597. Dactylagnus mundus Gill.
Carmen Island, Gulf of California.
Dactylagnus mundus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 505, Carmen Island, Gulf of California.

Genus 831. MYXODAGNUS Gill.
Myxodagnus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 269 (*opercularis*)

2598. Myxodagnus opercularis Gill.
Cape San Lucas, Lower California.
Myxodagnus opercularis Gill, Proc. Ac. Nat. Sci. Phila. 1861, 270, Cape San Lucas, Lower California.

Family CXCIV. URANOSCOPIDÆ. The Star-Gazers.

Genus 832. ASTROSCOPUS (Brevoort) Gill. *Star-gazers.*
Astroscopus (Brevoort) Gill, Proc. Ac. Nat. Sci. Phila. 1860, 20 (*anoplus*).

2599. Astroscopus y-græcum (Cuvier & Valenciennes).
South Atlantic Coast, from Cape Hatteras to the Caribbean Sea.
Uranoscopus y-græcum Cuvier & Valenciennes, Hist. Nat. Poiss., III, 308, 1829, origin unknown.

2600. Astroscopus zephyrius Gilbert & Starks.
Magdalena Bay, Lower California.
Astroscopus zephyrius Jordan & Starks, Proc. U. S. Nat. Mus. 1896, Magdalena Bay, Lower California.

2601. Astroscopus guttatus Abbott.
Atlantic Coast of the United States, from Long Island to Virginia; not known south of Cape Hatteras.
Astroscopus guttatus Abbott, Proc. Ac. Nat. Sci. Phila. 1860, 365, Cape May, New Jersey.

Genus 833. KATHETOSTOMA Günther.
Kathetostoma Günther, Cat., II, 231, 1860 (*lævе*).

2602. Kathetostoma averruncus Jordan & Bollman.
Pacific Ocean, off coast of Colombia.
Kathetostoma averruncus Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 163; off coast of Colombia, 8° 57′ N., 79° 31′ 30″ W., at Albatross Station 2800, in 7 fathoms.

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*Subgenus and species based on description of Dactyloscopus sp. nov., Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 628; not *D. mundus* Gill, Proc. Ac. Nat. Sci. 1862, 505.

2603. Kathetostoma albigutta Bean.

Gulf of Mexico.

Kathetostoma albigutta Bean, Proc. U. S. Nat. Mus. 1892, 121, Gulf of Mexico, at Albatross Station 2403, 28° 42′ 30″ N., 85° 29′ W.

Family CXCV. BATRACHOIDIDÆ The Toadfishes.

Genus 834. BATRACHOIDES Lacépède.

Batrachoides Lacépède, Hist. Nat. Poiss., II, 451, 1800 ("*tau*" Lacépède = *surinamensis*).

2604. Batrachoides surinamensis (Bloch & Schneider).

Coast of Guiana and Brazil.

Batrachus surinamensis Bloch & Schneider, Syst. Ichth., 43, 1801, Surinam, from a specimen in the museum of Paris.

2605. Batrachoides pacifici (Günther).

Panama.

Batrachus pacifici Günther, Cat., III, 173, 1861, Panama.

Genus 835. OPSANUS Rafinesque. *Toadfishes.*

Opsanus Rafinesque, Amer. Monthly Mag. 1817, 203 (*cerapalus*).

2606. Opsanus tau (Linnæus). *Toadfish.*

Atlantic Coast from Massachusetts to the West Indies.

Gadus tau Linnæus, Syst. Nat., ed. XII, 439, 1766, Charleston, South Carolina.

2607. Opsanus pardus (Goode & Bean). *Sarpo.*

Gulf of Mexico.

Batrachus tau pardus Goode & Bean, Proc. U. S. Nat. Mus. 1879, 336, Pensacola Snapper Banks.

Genus 836. PORICHTHYS Girard. *Midshipmen.*

Porichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 141 (*notatus*).

Mantopaedium

2608. Porichthys porosissimus Cuvier & Valenciennes. *Bagre Sapo.*

South Carolina to Montevideo; Pensacola.

Batrachus porosissimus Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 501, 1837, Surinam, Cayenne, Rio Janeiro, and St. Catherine.

2609. Porichthys notatus Girard. *Singing-fish; Midshipman; Cabezon; Sapo.*

Pacific Coast from Puget Sound to Panama.

Porichthys notatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 141, San Francisco.

2610. Porichthys margaritatus (Richardson).

Pacific Coast of tropical America.

Batrachus margaritatus Richardson, Voyage of the Sulphur, Fishes, 1845–1867, Pacific Coast of Central America.

Genus 837. THALASSOPHRYNE Günther. *Poison Toadfishes.*

Thalassophryne Günther, Cat., III, 174, 1861 (*maculosa*).

2611. Thalassophryne maculosa Günther.

Caribbean Sea.

Thalassophryne maculosa Günther, Cat., III, 175, 1861, Puerto Cabello, near Aspinwall.

2612. Thalassophryne reticulata (Günther).

Panama.

Thalassophryne reticulata Günther, Proc. Zool. Soc. Lond. 1864, 150, 155, Panama.

2613. Thalassophryne dowi Jordan & Gilbert.

Pacific Coast of North America, from Punta Arenas to Panama.

Thallassophryne dowi Jordan & Gilbert, Proc. U. S. Nat. Mus. 1887, 388, Punta Arenas.

Porichthys plectrodon Jord.
Jordan.

The type of porosissimus has A. 33.
Sauvage & Dabault. 32 in Delalande.
error in Cat. hard to count above 25 & 26 in some st

Sauvage
Thalassodaictor. n. subg. Sauv.

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Group BLENNIOIDEI. The Blennioid Fishes.

Family CXCVI. BLENNIIDÆ. The Blennies.

Genus 838. ENNEANECTES Jordan & Evermann.

Enneanectes Jordan & Evermann, Proc. Cal. Ac. Sci. 1895, 501 (*carminale*).

2614. Enneanectes carminalis (Jordan & Gilbert).

Mazatlan, Mexico. Swan I. Honduras Reyes

Tripterygium carminale Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 362, Mazatlan.

Genus 839. HETEROSTICHUS Girard.

Heterostichus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 143 (*rostratus*).

2615. Heterostichus rostratus Girard.

Coast of California from San Francisco to San Diego.

Heterostichus rostratus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 143, San Diego, California.

Genus 840. GIBBONSIA Cooper.

Gibbonsia Cooper, Proc. Cal. Ac. Sci., III, 1864, 109 (*elegans*).

2616. Gibbonsia evides (Jordan & Gilbert). *Kelpfish; Senorita.*

Coast of California, south to Point Conception.

Clinus evides Jordan & Gilbert, Synopsis, 763, 1883, Monterey, California.

2617. Gibbonsia elegans (Cooper).

Coast of southern California; Point Conception to Todos Santos.

Myxodes elegans Cooper, Proc. Cal. Ac. Sci., III, 1864, 109, San Diego; Santa Barbara.

Genus 841. NEOCLINUS Girard.

Neoclinus Girard, U. S. Pac. R. R. Surv., Fish., X, 114, 1858 (*blanchardi*).

Subgenus NEOCLINUS Girard.

2618. Neoclinus blanchardi Girard.

Coast of California, Monterey to San Diego.

Neoclinus blanchardi Girard, U. S. Pac. R. R. Surv., Fish., 114, 1858, off San Diego, California.

Subgenus PTEROGNATHUS Girard.

Pterognathus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 57 (*satiricus*).

2619. Neoclinus satiricus Girard.

Coast of California, from Monterey to Santa Barbara.

Neoclinus satiricus Girard, Proc. Ac. Nat. Sci. Phila. 1859, 57, Monterey Bay.

Genus 842. MALACOCTENUS Gill.

Malacoctenus Gill, Proc. Ac. Nat. Sci. Phila. 1860, 103 (*delalandi*).

2620. Malacoctenus ocellatus (Steindachner).

Bahama Islands.

Clinus ocellatus Steindachner, Ichth. Beitr., V, 182, 1876, Bahama Islands.

2621. Malacoctenus varius (Poey).

Cuba.

Myxodes varius Poey, Enumeratio, I, 132, 5, fig. 2, 1875, Havana.

2622. Malacoctenus macropus (Poey).

Cuba.

Myxodes macropus Poey, Synopsis, III, 99, 1868, Havana.

2623. Malacoctenus lugubris (Poey).

Cuba.

Myxodes lugubris Poey, Enumeratio, 131, 1875, Cuba.

2624. Malacoctenus gilli (Steindachner).

Barbados.

Clinus gilli Steindachner, Ichth. Notizen, VI, 46, 1867, Barbados.

2625. Malacoctenus bimaculatus (Steindachner).
Small rocky islands north of Cuba.
Clinus bimaculatus Steindachner, Ichth. Beitr., v, 180, 1876, islands off Cuba.

2626. Malacoctenus delalandi (Cuvier & Valenciennes).
Coast of Brazil and the west coast of Mexico.
Clinus delalandi Cuvier & Valenciennes, Hist. Nat. Poiss., 378, 1836, Brazil.

2627. Malacoctenus versicolor (Poey).
Cuba.
Myxodes versicolor Poey, Enumeratio, i, 131, 5, fig. 1, 1875, Cuba.

2628. Malacoctenus biguttatus (Cope).
New Providence, Bahamas.
Labrisomus biguttatus Cope, Trans. Amer. Philos. Soc. Phila. 1873, 473, New Providence, Bahamas.

Genus 843. LABRISOMUS Swainson.
Labrisomus Swainson, Nat. Hist. Classn. Fishes, ii, 277, 1839 (*pectinifer*).

2629. Labrisomus herminier (LeSueur).
St. Bartholomew; West Indies.
Blennius herminier LeSueur, Jour. Ac. Nat. Sci. Phila., iv, 1824, 361, St. Bartholomew.

2630. Labrisomus nuchipinnis (Quoy & Gaimard).
West Indies; South Atlantic Coast.
Clinus nuchipinnis Quoy & Gaimard, Voy. Urania, Zool., 1824, Brazil.

2631. Labrisomus xanti Gill.
La Paz, Lower California.
Labrosomus xanti Gill, Proc. Ac. Nat. Sci. Phila. 1860, 107, Cerro Blanco, Cape San Lucas.

2632. Labrisomus bucciferus Poey.
Cuba.
Labrisomus bucciferus Poey, Synopsis, 399, 1868, Cuba.

2633. Labrisomus microlepidotus Poey.
Cuba.
Labrisomus microlepidotus Poey, Anal. Soc. Eps. Hist. Nat., xix ?, 246, 1, 8, fig. 2, 1880, Cuba.

Genus 844. MNIERPES* Jordan & Evermann.
Mnierpes Jordan & Evermann, new genus (*macrocephalus*).

2634. Mnierpes macrocephalus (Günther).
Pacific Coast of Central America; Panama.
Clinus macrocephalus Günther, Cat., iii, 267, 1861, Pacific Coast of Central America.

Genus 845. GOBIOCLINUS Gill.
Gobioclinus Gill, Proc. Ac. Nat. Sci. Phila. 1860, 102 (*gobio*).

2635. Gobioclinus gobio (Cuvier & Valenciennes).
Lesser Antilles.
Clinus gobio Cuvier & Valenciennes, Hist. Nat. Poiss., xi, 395, 1836, Lesser Antilles.

Genus 846. STARKSIA Jordan & Evermann.
Starksia Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 231 (*cremnobates*).

2636. Starksia cremnobates (Gilbert).
Gulf of California.
Labrosomus cremnobates Gilbert, Proc. U. S. N. M. 1890, 100, Gulf of California.

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* Distinguished from *Labrisomus* by the elongate form.

Anchenoplinus grandicornis
Rosen.
Antros.
Zool Inst Lund 1911.

Type of Tekla Nichols
Miami copia sept 19. 1922.
(no agree with ID)

Genus 847. CRYPTOTREMA Gilbert.

Cryptotrema Gilbert, Proc. U. S. Nat. Mus. 1890, 101 (*corallinum*).

2637. Cryptotrema corallinum Gilbert.

Coast of California, south of Point Conception.
Cryptotrema corallinum Gilbert, Proc. U. S. Nat. Mus. 1890, 101, coast of California, south of Point Conception.

Genus 848. EXERPES Jordan & Evermann.

Exerpes Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 232 (*asper*).

2638. Exerpes asper (Jenkins & Evermann).

Guaymas, Mexico.
Auchenopterus asper Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 154, Guaymas, Mexico.

Genus 849. AUCHENOPTERUS Günther.

Auchenopterus Günther, Cat., III, 275, 1861 (*monophthalmus*).

2639. Auchenopterus altivelis (Lockington).

La Paz, Lower California.
Cremnobates altivelis Lockington, Proc. Ac. Nat. Sci. Phila. 1881, 116, La Paz, Lower California.

2640. Auchenopterus marmoratus (Steindachner).

Florida Keys to Cuba; Key West.
Cremnobates marmoratus Steindachner, Ichth. Beitr., V, 174, pl. 12, fig. 6, 1876, near Cuba.

2641. Auchenopterus affinis (Steindachner).

West Indies; Key West; St. Thomas.
Cremnobates affinis Steindachner, Ichth. Beitr., V, 178, 1876, St. Thomas.

2642. Auchenopterus monophthalmus Günther.

Gulf of California to Panama.
Auchenopterus monophthalmus Günther, Cat., III, 275, 1861, Panama.

2643. Auchenopterus integripinnis (Rosa Smith).

Coast of California, and southward to Todos Santos.
Cremnobates integripinnis Rosa Smith, Proc. U. S. Nat. Mus. 1880, 147, La Jolla, near San Diego.

2644. Auchenopterus nigripinnis (Steindachner).

Barbados.
Clinus nigripinnis Steindachner, Ichth. Notizen, VI, 46, 1867, Barbados.

2645. Auchenopterus fasciatus (Steindachner).

Florida Straits; north to Key West.
Cremnobates fasciatus Steindachner, Ichth. Beitr., V, 176, 1876, Florida Straits.

2646. Auchenopterus nox (Jordan & Gilbert).

Key West.
Cremnobates nox Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 30, Key West.

Genus 850. PARACLINUS Mocquard.

Paraclinus Mocquard, Bull. Soc. Philom. Paris 1886, 41 (*chaperi*).

2647. Paraclinus chaperi Mocquard.

Bay of Quanta, near Barcelona, in Venezuela.
Paraclinus chaperi Mocquard, Bull. Soc. Philom. Paris 1886, 41, Bay of Quanta, Venezuela.

Genus 851. BLENNIUS (Artedi) Linnæus. *Blennies.*

Blennius (Artedi) Linnæus, Syst. Nat., ed. X, 256, 1758 (*galerita*).

Subgenus LIPOPHRYS Gill.

Lipophrys Gill, Amer. Nat., June, 1896, 498 (*pholis*).

2648. Blennius carolinus (Cuvier & Valenciennes).

South Carolina.
Pholis carolinus Cuv. & Val., Hist. Nat. Poiss., XI, 276, 1836, Carolina.

Subgenus BLENNIUS (Artedi) Linnæus.

2649. Blennius fucorum Cuvier & Valenciennes.
Off the Azores; also off New York.
Blennius fucorum Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 263, 1836, 240 miles south of the Azores.

2650. Blennius stearnsi Jordan & Gilbert.
Gulf of Mexico.
Blennius stearnsi Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 300, Pensacola Snapper Banks.

2651. Blennius favosus Goode & Bean.
Gulf of Mexico; Garden Key, Florida.
Blennius favosus Goode & Bean, Proc. U. S. Nat. Mus. 1882, 416, Garden Key, Florida.

2652. Blennius marmoreus Poey.
Cuba.
Blennius marmoreus Poey, Enumeratio, 130, 1875, Cuba.

2653. Blennius truncatus (Poey).
Cuba.
Blennius truncatus Poey, Memorias, II, 424, 1861, Cuba.

2654. Blennius vinctus Poey.
Cuba.
Blennius vinctus Poey, Repertorio, 243, 1867, Havana.

2655. Blennius cristatus Linnæus.
Tropical parts of the Atlantic.
Blennius cristatus Linnæus, Syst. Nat., ed. x, 256, 1758, Indies; after Gronow.

Genus 852. SCARTELLA Jordan.
Scartella Jordan, Proc. U. S. Nat. Mus. 1886, 50 (*microstoma*).

2656. Scartella microstoma (Jordan).
Cuba.
Blennius microstomus Poey, Memorias, II, 288, 1860, Cuba.

Genus 853. HYPLEUROCHILUS Gill.
Hypleurochilus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 168 (*geminatus*).

2657. Hypleurochilus geminatus (Wood).
South Atlantic and Gulf coasts of United States.
Blennius geminatus Wood, Jour. Ac. Nat. Sci. Phila., IV, 1824, 278, Charleston, South Carolina.

Genus 854. HYPSOBLENNIUS Gill.
Hypsoblennius Gill, Cat. Fishes East Coast U. S., 20, 1861 (*hentzi*).

2658. Hypsoblennius gilberti (Jordan).
California, from Point Conception southward to Todos Santos.
Isesthes gilberti Jordan, Proc. U. S. Nat. Mus. 1882, 349, Santa Barbara, Cal.

2659. Hypsoblennius gentilis (Girard).
Coast of California from Monterey to Cape San Lucas.
Blennius gentilis Girard, Proc. Ac. Nat. Sci. Phila. 1854, 149, Monterey, Cal.

2660. Hypsoblennius striatus (Steindachner).
Panama.
Blennius striatus Steindachner, Ichth. Beitr., V, 15, 1876, Panama.

2661. Hypsoblennius ionthas (Jordan & Gilbert).
Pensacola, Florida.
Isesthes ionthas Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 299, Pensacola.

2662. Hypsoblennius scrutator Jordan & Gilbert.
South Carolina to Texas.
Isesthes scrutator Jordan & Gilbert, Proc. U. S. N. M. 1882, 300, Pensacola, Fla.

C+U

Blennius pelicornis Garman.
Nat Hist Bull. Univ of Iowa
Tortugas. Coll. Nutting, 1896 8

Homeotus cauloptus Jordan

Chaenodes novemlineatus Wood

C. quadrif. is ♀ of bosquianus

Blennius fabbri Nichols = yg of bosquianus

2663. Hypsoblennius punctatus (Wood).
Coast of North and South Carolina.
Blennius punctatus Wood, Jour. Ac. Nat. Sci. Phila., IV, 1824, 279, Charleston, South Carolina.

2664. Hypsoblennius brevipinnis (Günther).
Pacific Coast of Mexico, from Mazatlan to Panama.
Blennius brevipinnis Günther, Cat., III, 226, 1861, west coast Central America.

Genus 855. CHASMODES Cuvier & Valenciennes.
Chasmodes Cuv. & Val., Hist. Nat. Poiss., XI, 295, 1836 (*bosquianus*).

2665. Chasmodes jenkinsi Jordan & Evermann.
Gulf of California.
Chasmodes jenkinsi Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, Bay of Guaymas, Sonora.

2666. Chasmodes saburræ Jordan & Gilbert.
Pensacola Bay, Florida.
Chasmodes saburræ Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 298, Pensacola, Florida.

2667. Chasmodes bosquianus (Lacépède).
New York to Florida.
Blennius bosquianus Lacépède, Hist. Nat. Poiss., II, 493, 1800, South Carolina.

2668. Chasmodes quadrifasciatus (Wood). = f. bosquianus
Probably South Atlantic Coast of United States.
Pholis quadrifasciatus Wood, Jour. Ac. Nat. Sci. Phila., IV, 1824, 282, locality unknown, probably South Carolina.

Genus 856. ATOPOCLINUS Vaillant.
Atopoclinus Vaillant, Bull. Soc. Philom. 1894, 73 (*ringens*).

2669. Atopoclinus ringens Vaillant.
Gulf of California.
Atopoclinus ringens Vaillant, Bull. Soc. Philom. 1894, 74, Gulf of California.

Genus 857. RUNULA Jordan & Bollman.
Runula Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 171 (*azalea*).

2670. Runula azalea Jordan & Bollman.
Galapagos Archipelago.
Runula azalea Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 171, Indefatigable Island, Galapagos Archipelago.

Genus 858. SCARTES* Jordan & Evermann.
Scartes Jordan & Evermann, new genus (*rubropunctatus*).

2671. Scartes rubropunctatus (Cuvier & Valenciennes).
Coast of Peru and Chile, north to Panama.
Salarias rubropunctatus Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 348, 1836, Juan Fernandez.

Genus 859. RUPISCARTES Swainson.
Rupiscartes Swainson, Classn. Fishes, II, 275, 1839 (*atlanticus*).

2672. Rupiscartes atlanticus (Cuvier & Valenciennes).
Tropical America, on both coasts, north to West Indies and to Todos Santos.
Salarias atlanticus Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 321, 1836, Atlantic Ocean.

Genus 860. ENTOMACRODUS Gill.
Entomacrodus Gill, Proc. Ac. Nat. Sci. Phila. 1859, 168 (*nigricans*).

2673. Entomacrodus chiostictus (Jordan & Gilbert).
Pacific Coast of Mexico.
Salarias chiostictus Jordan & Gilbert, Synopsis, 363, 1883, Mazatlan, Mexico.

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* *Differs from Salarias (quadripinnis)* in the continuous dorsal; no posterior canines.

2674. Entomacrodus margaritaceus (Poey).
Cuba.
Salarias margaritaceus Poey, Memorias, II, 289, 1861, Cuba.

2675. Entomacrodus decoratus Poey.
Cuba.
Entomacrodus decoratus Poey, Synopsis, 398, 1868, Cuba.

2676. Entomacrodus nigricans Gill.
West Indies.
Entomacrodus nigricans Gill, Proc. Ac. Nat. Sci. Phila. 1859, 168, Barbados.

Genus 861. SALARIICHTHYS Guichenot.
Salariichthys Guichenot, Mém. Soc. Sci. Nat. Cher., XIII, 1867, 96 (*textilis*).

2677. Salariichthys textilis Quoy & Gaimard.
West Indies, from Bermudas to Brazil.
Salarias textilis Quoy & Gaimard, in Cuvier & Valenciennes, Hist. Nat. Poiss., XI, 307, 1836, Ascension Island.

Genus 862. OPHIOBLENNIUS Gill.
Ophioblennius Gill, Proc. Ac. Nat. Sci. Phila. 1860, 103 (*webbii*), substitute for *Blennophis* Valenciennes (*webbii*), not *Blennophis* Swainson, a genus of *Clinidæ*.

2678. Ophioblennius webbii (Valenciennes).
West Indies and Canary Islands.
Blennophis webbii Valenciennes, in Webb & Berthelot, Iles Canaries, 1836, Canary Islands.

2679. Ophioblennius steindachneri Jordan & Evermann.
West coast of Mexico.
Ophioblennius steindachneri Jordan & Evermann, Fishes North and Middle America, 1896, Mazatlan.

Family CXCVII. CHÆNOPSIDÆ.

Genus 863. EMBLEMARIA Jordan & Gilbert.
Emblemaria Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 627 (*nivipes*).

2680. Emblemaria atlantica Jordan & Evermann.
Gulf of Mexico; Snapper Banks off Pensacola.
Emblemaria atlantica Jordan & Evermann, Fishes North and Middle America, 1896, Gulf of Mexico.

2681. Emblemaria nivipes Jordan & Gilbert.
Pearl Island, near Panama.
Emblemaria nivipes Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 627, Pearl Island, near Panama.

Genus 864. LUCIOBLENNIUS Gilbert.
Lucioblennius Gilbert, Proc. U. S. Nat. Mus. 1890, 103 (*alepidotus*).

2682. Lucioblennius alepidotus Gilbert.
Gulf of California,
Lucioblennius alepidotus Gilbert, Proc. U. S. N. M. 1890, 103, Lower California.

Genus 865. PHOLIDICHTHYS Bleeker.
Pholidichthys Bleeker, Boeroe, 406, 1857 (*leucotænia*).

2683. Pholidichthys anguilliformis Lockington.
Gulf of California.
Pholidichthys anguilliformis Lockington, Proc. Ac. Nat. Sci. Phila. 1881, 118, San Jose Island, Lower California.

Genus 866. PSEDNOBLENNIUS Jenkins & Evermann.
Psednoblennius Jenkins & Evermann, Proc. U. S. N. M. 1888, 156 (*hypacanthus*).

2684. Psednoblennius hypacanthus Jenkins & Evermann.
Guaymas, Sonora.
Psednoblennius hypacanthus Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 156, Guaymas, Mexico.

Emblemaria oculicirris jn.

Stachmanstin, Teckla
Teckla Nichols

Bull Creek Mus. 1911
XXX, 90

Stachmann

Genus 867. CHÆNOPSIS Gill.

Chænopsis Gill, Ann. Lyc. Nat. Hist. N. Y., VIII, 1865, 141, pl. 3, fig. 3 (*ocellatus*).

2685. Chænopsis ocellatus Poey.

Matanzas, Cuba.

Chænopsis ocellatus Poey, in Gill, Ann. Lyc. Nat. Hist. N. Y., VIII, 1867, 143, Matanzas, Cuba.

Family CXCVIII. XIPHIDIIDÆ.

Genus 868. STATHMONOTUS Bean.

Stathmonotus Bean, Proc. U. S. Nat. Mus. 1888, 191 (*hemphilli*).

2686. Stathmonotus hemphillii Bean.

Key West, Florida.

Stathmonotus hemphillii Bean, Proc. U. S. Nat. Mus. 1888, 191, pl. 13, Key West, Florida.

Genus 869. BRYOSTEMMA Jordan & Williams.

Bryostemma Jordan & Williams, in Jordan & Evermann, Fishes North and Middle America, 1896 (*nugator*).

2687. Bryostemma polyactocephalum (Pallas).

Kamchatka to Puget Sound.

Blennius polyactocephalus Pallas, Zool. Rosso-Asiat., III, 179, 1811, Kamchatka.

2688 Bryostemma nugator Jordan & Williams.

Near Seattle, Washington.

Bryostemma nugator Jordan & Williams, in Jordan & Evermann, Fishes North and Middle America, 1896, Puget Sound.

Genus 870. BLENNIOPHIDIUM Boulenger. = Opisthocentrus

Blenniophidium Boulenger, Proc. Zool. Soc. Lond. 1892, 583 (*petropauli*).

2689. Blenniophidium petropauli Boulenger.

Kamchatka.

Blenniophidium petropauli Boulenger, Proc. Zool. Soc. Lond. 1892, 584, Petropaulovski Harbor, Kamchatka.

Genus 871. APODICHTHYS Girard.

Apodichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 150 (*flavidus*).

2690. Apodichthys flavidus Girard.

Point Conception to Vancouver Island.

Apodichthys flavidus Girard, Proc. Ac. Nat. Sci. 1854, 150, Presidio (San Francisco), California.

2691. Apodichthys univitatus Lockington.

Gulf of California.

Apodichthys univitatus Lockington, Proc. Ac. Nat. Sci. Phila. 1881, 118, Gulf of California.

Genus 872. XERERPES Jordan & Gilbert.

Xererpes Jordan & Gilbert, Proc. Cal. Ac. Sci. 1895, 846 (*fucorum*).

2692. Xererpes fucorum (Jordan & Gilbert).

Coast of California.

Apodichthys fucorum Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 139, Los Pinos Point, near Monterey, California.

Genus 873. ULVICOLA Gilbert & Starks.

Ulvicola Gilbert & Starks, Proc. U. S. Nat. Mus. 1896 (*sanctæ-rosæ*).

2693. Ulvicola sanctæ-rosæ Gilbert & Starks.

Santa Rosa Island, coast of California.

Ulvicola sanctæ-rosæ Gilbert & Starks, Proc. U. S. Nat. Mus. 1896, Santa Rosa Island, California.

Genus 874. PHOLIS (Gronow) Scopoli.

Pholis (Gronow) Scopoli, Introductio Hist. Nat. 456, 1777 (*gunnellus*).

2694. Pholis gunnellus (Linnæus). *Gunnel; Butter-fish.*

North Atlantic, south to Cape Cod.

Blennius gunnellus Linnæus, Syst. Nat., ed. XII, I, 443, 1766, Atlantic Ocean.

2695. Pholis fasciatus (Bloch & Schneider).

Greenland to Alaska.

Centronotus fasciatus Bloch & Schneider, 165, pl. 37, fig. 1, 1801.

2696. Pholis ornatus (Girard).

San Francisco to Alaska.

Gunnellus ornatus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 149, Presidio (San Francisco), California.

2697. Pholis maxillaris (Bean). = fasciatus

St. Paul Island, Alaska.

Muræoides maxillaris Bean, Proc. U. S. Nat. Mus. 1881, 147, St. Paul Island, Alaska.

= Pholis.

Genus 875. RHODYMENICHTHYS Jordan & Evermann.

Rhodymenichthys Jordan & Evermann, new genus (*ruberrimus*).

2698. Rhodymenichthys dolichogaster (Pallas).

Kamchatka and Aleutian Islands.

Blennius dolichogaster Pallas, Zoogr. Rosso-Asiat., III, 175, 1811, Kamchatha.

2699. Rhodymenichthys ruberrimus (Cuvier & Valenciennes).

Bering Sea and neighboring waters; Kuril Islands and Robben Island; also from Copper and Bering islands.

Gunnellus ruberrimus Cuvier & Valenciennes, Hist. Nat. Poiss., XIV, 440, Kuril Islands (after Pallas).

2700. Rhodymenichthys tænia (Pallas). = fasciatus

Kuril Islands.

Blennius tænia Pallas, Zoogr. Rosso-Asiat., III, 178, 1811, Kuril Islands.

Genus 876. GUNNELLOPS Bleeker.

Gunnellops Bleeker, 1874 (*roseus*).

2701. Gunnellops roseus (Pallas).

Kuril Islands.

Blennius roseus Pallas, Zoogr. Rosso-Asiat., III, 178, 1811, Kuril Islands.

Genus 877. ASTERNOPTERYX Ruppell.

Asternopteryx Ruppell, in Günther, Cat., III, 288, 1861 (*gunelliformis*).

2702. Asternopteryx gunelliformis Ruppell.

Greenland.

Asternopteryx gunelliformis Ruppell, in Günther, Cat., III, 288, 1861, probably from Greenland; type in Senchenberg Museum.

2703. Asternopteryx ocellatus (Tilesius).

Kamchatka.

Ophidium ocellatus Tilesius, Mém. Ac. St. Petersb., II, 237, 1811, Kamchatka.

Genus 878. ANOPLARCHUS Gill.

Anoplarchus Gill, Proc. Ac. Nat. Sci. Phila. 1861, 261 (*atropurpureus*).

2704. Anoplarchus atropurpureus (Kittlitz).

Alaska to San Francisco.

Ophidium atropurpureum Kittlitz, Denkwürd. einer Reise Russ.-Amer., I, 225, 1858.

2705. Anoplarchus alectrolophus (Pallas).

Island of Talek, Gulf of Penshin.

Blennius alectrolophus Pallas, Zoogr. Rosso-Asiat., III, 174, 1811, island of Talek.

5. P. pectus Kner.
Sturup Island

= Pholis [illegible]

= PHOLIDAPUS Goode & Bean

Pholidapus grebnitzii

Adamnoplexx is a valid generic spec

?

2706
X. ulvae
= X. chrysus

= Stichacid

X. occellatus

Opisthocentrus lentus Brian & Beam
O. quinquefasciatus
O. occellatus.

same

Not taf. v. dyjoerskii

Genus 879. XIPHISTES Jordan & Starks.

Xiphistes Jordan & Starks, Proc. Cal. Ac. Sci. 1895, 846 (*chirus*).

2706. Xiphistes ulvæ Jordan & Starks.

Waadda Island, Neah Bay.

Xiphistes ulvæ Jordan & Starks, Fishes Puget Sound, in Proc. Cal. Ac. Sci. 1895, 847, pl. 102, Waadda Island, Neah Bay.

2707. Xiphistes chirus (Jordan & Gilbert).

Monterey to Alaska.

Xiphistes chirus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 135, Los Pinos Point, near Monterey, California.

Genus 880. XIPHIDION Girard.

Xiphidion Girard, Pac. R. R. Surv., x, 119, 1858 (*mucosum*).

2708. Xiphidion mucosum Girard.

Monterey to Alaska.

Xiphidion mucosum Girard, Pac. R. R. Surv., 119, 1858, South Farallone Island, off California.

2709. Xiphidion rupestre (Jordan & Gilbert).

Pacific Coast, from Alaska to Monterey.

Xiphister rupestris Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 137, Monterey, California.

Genus 881. CEBEDICHTHYS Ayres.

Cebedichthys Ayres, Proc. Cal. Ac. Sci., I, 1855, 59 (*violaceus*).

2710. Cebedichthys violaceus (Girard).

San Francisco to Point Conception.

Apodichthys violaceus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 150, Monterey, California.

Genus 882. PLAGIOGRAMMUS Bean.

Plagiogrammus Bean, Proc. U. S. Nat. Mus. 1893, 699 (*hopkinsi*).

2711. Plagiogrammus hopkinsi Bean.

Monterey, California.

Plagiogrammus hopkinsi Bean, Proc. U. S. Nat. Mus. 1893, 699, plate, Monterey Bay, California.

Family CXCIX. STICHÆIDÆ.

Genus 883. EUMESOGRAMMUS Gill.

Eumesogrammus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 210 (*præcisus*).

2712. Eumesogrammus præcisus (Kröyer).

Greenland.

Clinus præcisus Kröyer, Naturh. Tidsskr., I, 25, 1836, Greenland.

Genus 884. ULVARIA* Jordan & Evermann.

Ulvaria Jordan & Evermann, new genus (*subbifurcata*).

2713. Ulvaria subbifurcata (Storer).

North Atlantic, south to Cape Cod.

Pholis subbifurcatus Storer, Rept. Fish. Mass., 63, 1839 (Massachusetts).

Genus 885. STICHÆUS Reinhardt.

Stichæus Reinhardt, Dansk. Vidensk. Natur. og Math. Afhandl. 1837, 109 (*punctatus*).

2714. Stichæus punctatus (Fabricius).

Polar seas, south to Cape Cod and Alaska.

Blennius punctatus Fabricius, Fauna Grœn., 153, 1870, Greenland.

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* *Distinguished from Eumesogrammus by the lateral line, which forks into two.*

Genus 886. LEPTOCLINUS Gill.

Leptoclinus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 209 (*maculatus*).

2715. Leptoclinus maculatus (Fries).

Greenland to Spitzbergen.
Clinus maculatus Fries, Kgl. Vet. Ak. Handl. 1837, 49, Greenland.

Genus 887. POROCLINUS Bean.

Poroclinus Bean, Proc. U. S. Nat. Mus. 1890, 40 (*rothrocki*).

2716. Poroclinus rothrocki Bean.

Between Nagia and Big Koniushi islands, Alaska.
Poroclinus rothrocki Bean, Proc. U. S. Nat. Mus. 1890, 40, Albatross Station 2852, latitude 55° 15′ N., longitude 159° 37′ W., in 58 fathoms.

Genus 888. ANISARCHUS Gill. = L. lumpenus

Anisarchus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 209 (*medius*).

2717. Anisarchus medius (Reinhardt).

Greenland to Norway and Spitzbergen.
Clinus medius Reinhardt, Dansk. Vidensk. Afh. 1838, 114, Greenland.

Genus 889. LUMPENUS Reinhardt.

Lumpenus Reinhardt, Dansk. Vidensk. Selsk. Natur. 1837, 110 (~~*lumpenus*~~). fabricii

2718. Lumpenus anguillaris (Pallas).

San Francisco to Alaska.
Blennius anguillaris Pallas, Zoogr. Rosso-Asiat., III, 176, 1811, about Kamchatka; no definite locality.

2719. Lumpenus ~~lumpenus~~ (Fabricius). fabricii Reinhardt
Greenland. St. Bristol Bay + Gulf of St Lawrence
Blennius lumpenus Fabricius, Fauna Grœnl., 151, 1870, Greenland.

2720. Lumpenus mackayi (Gilbert).

Nushagak River, Alaska.
Leptoblennius mackayi Gilbert, Rept. U. S. Fish Com. 1893 (1896), 450, pl. 32, Nushagak River, Alaska.

Genus 890. LEPTOBLENNIUS Gill.

~~*Leptoblennius* Gill, Proc. Ac. Nat. Sci. Phila. 1860, 21 (*serpentinus*).~~

Subgenus LEPTOBLENNIUS Gill.

2721. Leptoblennius serpentinus (Storer).

Cape Cod to Greenland.
Blennius serpentinus Storer, Proc. Bost. Soc. Nat. Hist., III, 1848, 30, no locality.

2722. Leptoblennius lampetræformis (Walbaum).

Greenland to Norway and Spitzbergen.
Blennius lampetræformis Walbaum, Artedi Piscium, 184, 1792, no locality.

Subgenus CENTROBLENNIUS Gill. Lumpenus.

Centroblennius Gill, Proc. Ac. Nat. Sci. Phila. 1860, 21 (*nubilus*).

2723. Leptoblennius nubilus (Richardson).

Wellington Sound.
Lumpenus nubilus Richardson, Last Arctic Voyage, Fish., 13, pl. 28, 1854, Wellington Sound.

Genus 891. PLECTOBRANCHUS Gilbert.

Plectobranchus Gilbert, Proc. U. S. Nat. Mus. 1890, 102 (*evides*).

2724. Plectobranchus evides Gilbert.

Coast of Oregon and Washington.
Plectobranchus evides Gilbert, Proc. U. S. Nat. Mus. 1890, 102, coast of Oregon and Washington.

Lumpenus is not available as specific na
nubécula = fabra cin.
D. about 6 3. A. 4 8. Both lger than ni
probabiliter leach fewer, often obsolete. esp
in young: a dusky blotch at base of

So spelled by Lu.

Family CC. CRYPTACANTHODIDÆ. The Wry-mouths.

Genus 892. DELOLEPIS Bean.

Delolepis Bean, Proc. U. S. Nat. Mus. 1881, 465 (*virgatus*).

2725. Delolepis virgatus Bean.

Coasts of British Columbia and southern Alaska, south to Puget Sound.
Delolepis virgatus Bean, Proc. U. S. Nat. Mus. 1881, 466, Kingcombe Inlet, British Columbia, and Port Wrangel, Alaska.

Genus 893. CRYPTACANTHODES Storer.

Cryptacanthodes Storer, Rept. Fishes Massachusetts, 28, 1839 (*maculatus*).

2726. Cryptacanthodes maculatus Storer.

North Atlantic, south to Cape Cod.
Cryptacanthodes maculatus Storer, Rept. Fish. Mass., 28, 1839, Massachusetts.

Genus 894. LYCONECTES Gilbert.

Lyconectes Gilbert, Rept. U. S. Fish Com. 1893 (1896), 446 (*aleutensis*).

2727. Lyconectes aleutensis Gilbert.

Aleutian Islands.
Lyconectes aleutensis Gilbert, Rept. U. S. Fish Com. 1893 (1896), 446, pl. 34, near Unalaska.

Family CCI. ANARHICHADIDÆ. The Wolf-Fishes.

Genus 895. ANARHICHAS (Artedi) Linnæus.

Anarhichas (Artedi) Linnæus, Syst. Nat., ed. x, 247, 1758 (*lupus*).

Subgenus ANARHICHAS Linnæus.

2728. Anarhichas lupus Linnæus. *Wolf-fish.*

North Atlantic, south to Cape Cod and France; rather common in America and Europe.
Anarhichas lupus Linnæus, Syst. Nat., ed. x, 247, 1758, no definite locality.

2729. Anarhichas minor Olafsen.

North Atlantic, on both coasts, chiefly north of the Arctic Circle.
Anarrhichas minor Olafsen, Reise in Island, 592, 1772, Iceland.

2730. Anarhichas lepturus Bean.

Alaska.
Anarrhichas lepturus Bean, Proc. U. S. Nat. Mus., II, 1879, 212, St. Michaels, Alaska.

2731. Anarhichas orientalis Pallas.

Alaska.
Anarrhichas orientalis Pallas, Zoogr. Rosso-Asiat., III, 77, 1811, Alaska.

Subgenus LYCICHTHYS Gill.

Lycichthys Gill, Ann. Record Sci. Indus. 1876 (1877), p. clxvii (*latifrons*).

2732. Anarhichas latifrons Steenstrup & Hallgrimsson.

North Atlantic, on both coasts; chiefly north of the Arctic Circle (Europe).
Anarrhichas latifrons Steenstrup & Hallgrimsson, Forh. Skand. Naturf., 3 die Mote, 1842, 647.

Genus 896. ANARRHICHTHYS Ayres.

Anarrhichthys Ayres, Proc. Cal. Ac. Sci., I, 1855, 32 (*ocellatus*).

2733. Anarrhichthys ocellatus Ayres.

Pacific Coast, from Monterey north to Puget Sound.
Anarrhichthys ocellatus Ayres, Proc. Cal. Ac. Sci., I, 1855, 31, San Francisco.

Family CCII. CERDALIDÆ.

Genus 897. CERDALE Jordan & Gilbert.

Cerdale Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 332 (*ionthas*).

2734. Cerdale ionthas Jordan & Gilbert.

Panama.

Cerdale ionthas Jordan & Gilbert, Bull. U. S. Fish Com. 1881, 332, Panama.

Genus 898. MICRODESMUS Günther.

Microdesmus Günther, Proc. Zool. Soc. Lond. 1864, 26 (*dipus*).

2735. Microdesmus dipus Günther.

Pacific Coast of tropical America.

Microdesmus dipus Günther, Proc. Zool. Soc. Lond., January 26, 1864, 4, pl. 3, fig. 2, Central America.

2736. Microdesmus retropinnis Jordan & Gilbert.

Panama.

Microdesmus retropinnis Jordan & Gilbert, Bull. U. S. F. C. 1881, 331, Panama.

Family CCIII. PTILICHTHYIDÆ. The Quill-Fishes.

Genus 899. PTILICHTHYS Bean.

Ptilichthys Bean, Proc. U. S. Nat. Mus., IV, 1881, 157 (*goodei*).

2737. Ptilichthys goodei Bean.

Aleutian Islands.

Ptilichthys goodei Bean, Proc. U. S. Nat. Mus., IV, 1881, 157, Port Levasheff, Unalaska.

Group OPHIDIOIDEI. The Eel-Pouts.

Family CCIV. ZOARCIDAE.

Genus 900. ZOARCES Cuvier.

Zoarces Cuvier, Règne Animal, ed. 2, II, 240, 1829 (*viviparus*).

Subgenus MACROZOARCES.

Macrozoarces Gill, Proc. Ac. Nat. Sc. Phila. 1863, 258 (*anguillaris*).

2738. Zoarces anguillaris (Peck).

Delaware to Labrador; rather common northward.

Blennius anguillaris Peck, Mem. Amer. Ac. Sci., II, 1804, 46, New Hampshire.

Genus 901. LYCODOPSIS Collett.

Lycodopsis Collett, Proc. Zool. Soc. Lond. 1879, 381 (*pacificus*).

2739. Lycodopsis pacificus Collett.

San Francisco to Puget Sound.

Lycodes (*Lycodopsis*) *pacificus* Collett, Proc. Zool. Soc. Lond. 1879, 381, said to be from Japan; doubtless an error.

2740. Lycodopsis crotalinus Gilbert.

Northern Pacific and off Santa Barbara Islands.

Lycodopsis crotalinus Gilbert, Proc. U. S. Nat. Mus. 1890, 105, off Santa Barbara Islands, at Albatross Station 2980, in 603 fathoms.

2741. Lycodopsis crassilabris Gilbert.

Coast of southern California.

Lycodopsis crassilabris Gilbert, Proc. U. S. Nat. Mus. 1890, 106, off southern California, at Albatross Station 2839.

Genus 902. APRODON Gilbert.

Aprodon Gilbert, Proc. U. S. Nat. Mus. 1890, 106 (*corteziana*).

2742. Aprodon corteziana Gilbert.

Cortez Banks, near San Diego, California.

Aprodon corteziana Gilbert, Proc. U. S. Nat. Mus. 1890, 107, Cortez Banks, off San Diego, at Albatross Stations 2925 and 2948, in 339 and 266 fathoms.

2740.1. = LYCISCUS Jakl.

[illegible]

Lycodes turnaeneri Collett, 54.
newfoundl.

Lycodes digitatus Rill of Drumsend = palearis Smitt.
Lycodes emsolus Rs & J.
Bernijden.

2751
= turneri young?

Genus 903. LYCODES Reinhardt.

Lycodes Reinhardt, Köngl. Danske Vidensk. Selsk. Naturv., Math. Afh., VII, 1838, 153 (*vahli*).

Subgenus LYCODES Reinhardt.

2743. Lycodes vahli Reinhardt.

Coast of Greenland.

Lycodes vahli Reinhardt, Kön. Dan. Vidensk. Selsk. Nat. Math. Afh., VII, 1838, 153, pl. 5, Greenland.

2744. Lycodes esmarki Collett.

North Atlantic; Gulf Stream, in about latitude 40°, to Finmark and Spitzbergen.

Lycodes esmarki Collett, Norges Fiske, 95, 1874, American specimens, from the Gulf Stream in about latitude 40°.

2745. Lycodes zoarchus Goode & Bean.

Atlantic Ocean, off Nova Scotia.

Lycopodes zoarchus Goode & Bean, Ocean. Ichth., 308, 1896, off Nova Scotia, in 130 fathoms.

2746. Lycodes reticulatus Reinhardt.

North Atlantic, from Greenland south to Narragansett Bay; also northern Europe.

Lycodes reticulatus Reinhardt, Kön. Dan. Vid. Selsk., 1838, 153, Greenland.

2747. Lycodes perspicillum Kröyer.

Off southern Newfoundland.

Lycodes perspicillum Kröyer, Dansk. Vidensk. Selsk. Afhandl., XI, 1845.

2748. Lycodes frigidus Collett.

Atlantic, off New England Coast.

Lycodes frigidus Collett, Forh. Vid. Selsk. Christ. 1878, Nos. 14, 45, near Spitzbergen.

2749. Lycodes palearis Gilbert.

Bristol Bay, Alaska.

Lycodes palearis Gilbert, Rept. U. S. Fish Com. 1893 (1896), 454, Bristol Bay, Alaska, at Albatross Stations 3253 and 3254, in 36 and 46 fathoms.

2750. Lycodes brevipes Bean.

Aleutian Islands.

Lycodes brevipes Bean, Proc. U. S. Nat. Mus. 1890, 38, between Unga and Nagai islands, in 110 fathoms.

2751. Lycodes coccineus Bean. = Liparis ?

Big Diomede Island, Bering Strait.

Lycodes coccineus Bean, Proc. U. S. Nat. Mus., IV, 1881, 144, Big Diomede Island, Bering Strait.

2752. Lycodes nebulosus Kröyer.

Greenland.

Lycodes nebulosus Kröyer, Kön. Dan. Vidensk. Sel. 1844, 140, Greenland.

2753. Lycodes seminudus Reinhardt.

North Atlantic, from Greenland to Spitzbergen.

Lycodes seminudus Reinhardt, Köng. Dansk. Selsk, etc., 1838, 233, Owenah, Greenland.

Genus 904. LYCENCHELYS Gill.

Lycenchelys Gill, Proc. Ac. Nat. Sci. Phila. 1884, 180 (*muræna*).

Subgenus LYCENCHELYS Gill.

2754. Lycenchelys verrillii (Goode & Bean).

Coast of Massachusetts and northward.

Lycodes verrillii Goode & Bean, Am. Jour. Sci. Arts, XIV, 1878, 474, 27 miles south and west of Chebucto Head, near Halifax.

2755. Lycenchelys paxillus (Goode & Bean).

Gulf Stream.

Lycodes paxillus Goode & Bean, Proc. U. S. Nat. Mus. 1879, 44, between Le Have and Sable Island Banks.

2756. Lycenchelys porifer (Gilbert).

Off Lower California.

Lycodes porifer Gilbert, Proc. U. S. Nat. Mus. 1890, 104, off Lower California, at Albatross Station 3009, in 857 fathoms.

Genus

Subgenus FURCELLA Jordan & Evermann.

Furcella Jordan & Evermann, Fishes N. and M. Amer., 1896 (*diapterus*).

2757. Lycenchelys diapterus (Gilbert).

Coasts of California and Oregon.

Lycodes diapterus Gilbert, Proc. U. S. N. M. 1891, 564, off coast of Oregon, at Albatross Stations 2892, 2896, and others, in 82 to 376 fathoms.

Genus 905. LYCODONUS Goode & Bean.

Lycodonus Goode & Bean, Bull. M. C. Z., x, No. 5, 208, 1883 (*mirabilis*).

2758. Lycodonus mirabilis Goode & Bean.

Off the New England Coast.

Lycodonus mirabilis Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 208, 1883, latitude 38° 20′ 8″ N., longitude 73° 23′ 20″ W., in 740 fathoms.

Genus 906. LYCODALEPIS Bleeker.

Lycodalepis Bleeker, Verl. Akad. Amst., ed. II, VIII, 369 (*mucosus*).

2759. Lycodalepis mucosus (Richardson).

Arctic seas.

Lycodes mucosus Richardson, Last Arctic Voyage, 362, pl. 26, 1855, Northumberland Sound.

2760. Lycodalepis turneri (Bean). = L. polaris

Northern Alaska.

Lycodes turneri Bean, Proc. U. S. Nat. Mus. 1878, 464, St. Michaels, Alaska.

2761. Lycodalepis polaris (Sabine).

Coast of north Georgia.

Blennius polaris Sabine, Parry's Jour., Voyage 1819–20, Supp., 212, North Georgia.

Genus 907. LYCONEMA Gilbert.

Lyconema Gilbert, Rept. U. S. Fish Com. 1893 (1896), 471 (*barbatum*).

2762. Lyconema barbatum Gilbert.

Coast of Alaska.

Lyconema barbatum Gilbert, Rept. U. S. Fish. Com. 1893 (1896), 471, pl. 35, coast of Alaska, at Albatross Station 3129, in 204 fathoms.

Genus 908. MAYNEA Cunningham.

Maynea Cunningham, Trans. Linn. Soc., XXVII, 471, 1871 (*patagonica*).

2763. Maynea pusilla Bean.

Coast of Alaska, north of Unalaska.

Maynea pusilla Bean, Proc. U. S. Nat. Mus. 1890, 39, Aleutian Islands, latitude 55° 10′ N., longitude 160° 18′ W., in 110 fathoms.

2764. Maynea brunnea Bean. = Maynea mucli

North Pacific, Unalaska; southern California.

Maynea brunnea Bean, Proc. U. S. Nat. Mus. 1890, 39, latitude 33° 08′ N., longitude 118° 40′ W., off San Clemente Island, southern California, in 414 fathoms.

2765. Maynea stigma (Lay & Bennett).

Kotzebue Sound.

Ophidium stigma Lay & Bennett, Zool. Beechey's Voy., 67, 1839, Kotzebue Sound.

= ? L. pardalis

? ad to genus Bothrocaria

= Magnica malleis.

Hymenis stigma

Genus 909. **BOTHROCARA** Bean. = Magnica

Bothrocara Bean, Proc. U. S. Nat. Mus. 1890, 38 (*mollis*).

2766. **Bothrocara mollis** Bean.

Coast of British Columbia.

Bothrocara mollis Bean, Proc. U. S. Nat. Mus. 1890, 39, off Queen Charlotte Islands, in 876 fathoms.

Genus 910 **GYMNELIS** Reinhardt.

Gymnelis Reinhardt, Dansk. Vidensk. Selsk. Afhandl., VII, 1838, 131 (*viride*).

2767. **Gymnelis viridis** Reinhardt.

Arctic seas, south to Alaska and Nova Scotia.

Gymnelis viridis Reinhardt, Dansk. Vidensk. Selsk. Afh., VII, 1838, 131, Greenland.

Genus 911. **LYCOCARA** Gill.

Lycocara Gill, Proc. Ac. Nat. Sci. Phila. 1884, 180 (*parrii*).

2768. **Lycocara parrii** (Ross).

Baffins Bay.

Ophidium parrii Ross, Parry's Third Voyage, App. 109, 1826, Baffins Bay.

Genus 912. **MELANOSTIGMA** Günther.

Melanostigma Günther, Proc. Zool. Soc. Lond. 1881, 21 (*gelatinosum*).

2769. **Melanostigma gelatinosum** Günther.

Deep waters of the western Atlantic; originally known from the Straits of Magellan, but since obtained in various localities from Cape Cod to the West Indies.

Melanostigma gelatinosum Günther, Proc. Zool. Soc. Lond. 1881, 21, pl. 2, fig. A, Straits of Magellan.

2770. **Melanostigma pammelas** Gilbert.

Coast of Alaska.

Melanostigma pammelas Gilbert, Rept. U. S. Fish Com. 1893 (1896), 472, pl. 35, coast of Alaska, at Albatross Station 3202, latitude 36° 46′ 10″ N., longitude 121° 58′ 45″ W., in 382 fathoms.

Family CCV. SCYTALINIDÆ.

Genus 913. **SCYTALINA** Jordan & Gilbert.

Scytalina Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 266 (*cerdale*).

2771. **Scytalina cerdale** Jordan & Gilbert.

Straits of Juan de Fuca, Waadda Island, near Cape Flattery.

Scytalina cerdale Jordan & Gilbert, Proc. U. S. Nat. Mus., III, 1880, 266, Waadda Island, Neah Bay.

Family CCVI. DEREPODICHTHYIDÆ.

Genus 914. **DEREPODICHTHYS** Gilbert.

Derepodichthys Gilbert, Rept. U. S. Fish Com. 1893 (1896), 456 (*alepidotus*).

2772. **Derepodichthys alepidotus** Gilbert.

Coast of British Columbia, off Queen Charlotte Island.

Derepodichthys alepidotus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 456, Queen Charlotte Island, at Albatross Station 3342, in 1,588 fathoms.

Family CCVII. OPHIDIIDÆ.

Genus 915. **LEPOPHIDIUM** Gill.

Lepophidium Gill. Am. Nat., XXIX, 1895, 167, substitute for *Leptophidium* Gill, Proc. Ac. Nat. Sci. Phila. 1863, 210 (*profundorum*); preoccupied in Serpents by *Leptophidium* Hallowell, 1860.

2773. **Lepophidium marmoratum** (Goode & Bean).

Gulf Stream.

Leptophidium marmoratum Goode & Bean, Proc. U. S. Nat. Mus. 1885, 423, latitude 23° 10′ 39″ N., longitude 82° 20′ 21″ W., in 213 fathoms.

2774. Lepophidium emmelas (Gilbert).
Coast of Lower California.
Leptophidium emmelas Gilbert, Proc. U. S. Nat. Mus. 1890, 110, coast of Lower California, at Albatross Stations 3007 and 3008, in 362 and 306 fathoms.

2775. Lepophidium stigmatistium (Gilbert).
Coast of Lower California.
Leptophidium stigmatistium Gilbert, Proc. U. S. Nat. Mus. 1890, 109, off Lower California, at Albatross Station 2996, in 112 fathoms.

2776. Lepophidium profundorum (Gill).
Gulf Stream, off the coast of Florida.
Leptophidium profundorum Gill, Proc. Ac. Nat. Sci. Phila. 1863, 211, Gulf Stream, off the coast of Florida.

2777. Lepophidium cervinum (Goode & Bean).
Gulf Stream.
Leptophidium cervinum Goode & Bean, Proc. U. S. Nat. Mus. 1885, 422, 40° 01′ N., 69° 56′ W., depth 76 fathoms.

2778. Lepophidium prorates (Jordan & Bollman).
Panama, and south of Panama.
Leptophidium prorates Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 172, Panama, and south of Panama.

2779. Lepophidium brevibarbe (Cuvier).
West Indies and Brazil.
Ophidium brevibarbe Cuvier, Règne Animal, ed. 2, II, 358, 1828 (Brazil).

2780. Lepophidium pardale (Gilbert).
Lower California.
Leptophidium pardale Gilbert, Proc. U. S. N. M. 1890, 108, off Lower California.

2781. Lepophidium microlepis (Gilbert).
Lower California.
Leptophidium microlepis Gilbert, Proc. U. S. Nat. Mus. 1890, 109, off Lower California.

Genus 916. OPHIDION (Artedi) Linnæus. *Cusk-eels.*
Ophidion (Artedi) Linnæus, Syst. Nat., ed. x, 259, 1758 (*barbatum*).

2782. Ophidion beani Jordan & Gilbert.
Gulf of Mexico; Snapper Banks off Pensacola, Florida.
Ophidion beani Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 43, Snapper Banks off Pensacola.

2783. Ophidion holbrooki (Putnam).
Key West, Florida; Gulf of Mexico.
Ophidium holbrooki Putnam, Proc. Bost. Soc. Nat. Hist. 1874, 342, Key West, Florida.

2784. Ophidion grœllsi Poey.
Cuba.
Ophidion grœllsi Poey, Memorias, II, 425, 1861, Havana.

Genus 917. CHILARA* Jordan & Evermann.
Chilara Jordan & Evermann, new genus (*taylori*).

2785. Chilara taylori (Girard).
Coast of California, from Monterey to San Diego.
Ophidium taylori Girard, Pac. R. R. Surv., x, 138, 1858, Monterey, California.

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* *Distinguished from Ophidion* by the spine on the opercle. The air bladder is ovate, not contracted, and without foramen, as in *Ophidion*.

Genus 918. **RISSOLA** * Jordan & Evermann.

Rissola Jordan & Evermann, new genus (*marginatum*).

2786. **Rissola marginata** (DeKay).

South Atlantic Coast of United States, from New York south to Pensacola.
Ophidium marginatum DeKay, New York Fauna: Fishes, 315, 1842, New York Harbor.

Genus 919 **OTOPHIDIUM** Gill.

Otophidium Gill, in Jordan, Cat. Fish. N. A., 126, 1885 (*omostigma*).

2787. **Otophidium omostigma** (Jordan & Gilbert).

Gulf of Mexico, Pensacola Snapper Banks.
Genypterus omostigma Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 301, Pensacola Snapper Banks.

2788. **Otophidium indefatigabile** Jordan & Bollman.

Indefatigable Island, Galapagos Archipelago.
Otophidium indefatigabile Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 172, Indefatigable Island in the Galapagos Archipelago.

2789. **Otophidium galeoides** Gilbert.

Coast of Lower California.
Ophidion galeoides Gilbert, Proc. U.S.N.M. 1890, 110, off Lower California.

Family CCVIII. LYCODAPODIDÆ.

Genus 920. **LYCODAPUS** Gilbert.

Lycodapus Gilbert, Proc. U. S. Nat. Mus. 1890, 107 (*fierasfer*).

2790. **Lycodapus dermatinus** Gilbert.

Coast of California, in deep water.
Lycodapus dermatinus Gilbert; Rept. U. S. Fish Com. 1893 (1896), 471, pl. 35, coast of California, at Albatross Station 3162, 37° 54′ 10″ N., 123° 30′ W., in 552 fathoms.

2791. **Lycodapus fierasfer** Gilbert.

Pacific Coast of America, Lower California to Washington, in deep water.
Lycodapus fierasfer Gilbert, Proc. U. S. Nat. Mus. 1890, 108, off Lower California and Washington, at Albatross Stations 2980, 3010, and 3072, in 610 to 1,005 fathoms.

2792. **Lycodapus parviceps** Gilbert.

Bering Sea, north of Unalaska Island.
Lycodapus parviceps Gilbert, Rept. U. S. Fish Com. 1893 (1896), 455, Bering Sea, north of Unalaska Island, at Albatross Station 3324 in 109 fathoms.

2793. **Lycodapus extensus** Gilbert.

Bering Sea, north of Unalaska Island.
Lycodapus extensus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 455, Bering Sea, north of Unalaska Island, at Albatross Station 3324, in 109 fathoms.

Family CCIX. FIERASFERIDÆ.

Genus 921. **FIERASFER** Cuvier.

Fierasfer Cuvier, Règne Animal, ed. 1, II, 239, 1817 (*imberbis*).

2794. **Fierasfer dubius** Putnam. *Pearl-fish.*

Lower California to Panama; especially common about the Pearl Islands, off Panama.
Fierasfer dubius Putnam, Proc. Bost. Soc. Nat. Hist. 1874, 344, Pearl Islands.

2795. **Fierasfer arenicola** Jordan & Gilbert.

Pacific Coast of Mexico.
Fierasfer arenicola Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 363, Mazatlan, Mexico.

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* *Distinguished from C* [illegible] *broad air bladder with a* [illegible] the opercular spine, and from Ophidion by the

2796. Pierasfer bermudensis (Jones).

West Indies, recorded from Bermuda, Havana, Key West, and St. Thomas.
Lefroyia bermudensis Jones, Zoologist, January, 1874, 3838, Bermuda.

Family CCX. BROTULIDÆ.

Genus 922. BROTULA Cuvier.

Brotula Cuvier, Règne Animal, ed. 2, II, 335, 1829 (*barbatus*).

2797. Brotula barbata (Bloch & Schneider).

West Indies.
Enchelyopus barbatus Bloch & Schneider, Syst. Ichth., 52, 1801, Havana; after Parra.

Ogilbia

Genus 923. DINEMATICHTHYS Bleeker.

Dinematichthys Bleeker, Bataë, 318, 1855 (*iluocœtoides*).

2798. Dinematichthys ventralis (Gill).

Lower California, about Cape San Lucas.
Brosmophycis ventralis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 253, Cape San Lucas.

Genus 924. BROSMOPHYCIS Gill.

Brosmophycis Gill, Proc. Ac. Nat. Sci. Phila. 1863, 253 (*marginatus*).

2799. Brosmophycis marginatus (Ayres).

San Francisco, California.
Brosmius marginatus Ayres, Proc. Cal. Ac. Sci., I, 1854, 13, Bay of San Francisco.

Genus 925. BYTHITES Reinhardt.

Bythites Reinhardt, Dansk. Vidensk. Selsk. Afhandl., VII, 1838, 178 (*fuscus*).

2800. Bythites fuscus Reinhardt.

The only specimen known, now in the museum at Copenhagen, was obtained in Greenland half a century ago.
Bythites fuscus Reinhardt, Dansk. Vidensk. Selsk. Afh. 1838, 178, Greenland

Genus 926. CATÆTYX Günther.

Catætyx Günther, Challenger Report, XXII, 104, 1887 (*messieri*).

2801. Gatætyx rubrirostris Gilbert.

Coast of California south of Point Conception, in deep water.
Catætyx rubrirostris Gilbert, Proc. U. S. Nat. Mus. 1890, 111, coast of California, at Albatross Stations 2909, 2925, and 2936, in 205 to 356 fathoms.

Genus 927. BARATHRODEMUS Goode & Bean.

Barathrodemus Goode & Bean, Bull. M. C. Z., X, No. 5, 200, 1883 (*manatinus*).

2802. Barathrodemus manatinus Goode & Bean.

Gulf Stream, north of Bermudas.
Barathrodemus manatinus Goode & Bean, Bull. Mus. Comp. Zool., X, No. 5, 200, 1883, 33° 51′ 20″ N., 76° W., in 647 fathoms.

Genus 928. DICROLENE Goode & Bean.

Dicrolene Goode & Bean, Bull. Mus. Comp. Zool., X, No. 5, 202, 1883 (*intronigra*).

2803. Dicrolene intronigra Goode & Bean.

Gulf Stream, from latitude 15° to 40° north.
Dicrolene intronigra Goode & Bean, Bull. Mus. Comp. Zool., X, No. 5, 202, 1883, Gulf Stream, latitude 34°.

Genus 929. DICROMITA Goode & Bean.

Dicromita Goode & Bean, Ocean. Ichth., 319, 1896 (*agassizii*).

2804. Dicromita agassizii Goode & Bean.

Off Granada.
Dicromita agassizii Goode & Bean, Ocean. Ichth., 319, 1896, off Granada, in 291 fathoms.

Ogilbia cayorum,
O. ventralis:

Muebles Promelas Eclipse
F.C.

Bussoqiga Ellipsoide

Genus 930. BARATHRONUS Goode & Bean.

Barathronus Goode & Bean, Bull. Mus. Comp. Zool., XII, 164, 1883 (*bicolor*).

2805. Barathronus bicolor Goode & Bean.

Off Guadaloupe Island, in deep water.

Barathronus bicolor Goode & Bean, Bull. Mus. Comp. Zool., XII, 164, 1883, off Guadaloupe, at Blake Station 71, in 769 fathoms.

Genus 931. MIXONUS Günther.

Mixonus Günther, Challenger Report, XXII, 108, 1887 (*laticeps*).

2806. Mixonus laticeps (Günther).

Mid-Atlantic, in deep water.

Bathynectes laticeps Günther, Ann. Mag. Nat. Hist., II, 1878, 20, mid-Atlantic, at Challenger Station 104, in 2,500 fathoms.

Genus 932. BATHYONUS Goode & Bean.

Bathyonus Goode & Bean, Proc. U. S. Nat. Mus., VIII, 1885, 603 (*catena*).

2807. Bathyonus compressus (Günther).

Challenger Stations 184, off Raine Island; 205 off Philippine Islands, and 107 in mid-Atlantic.

Bathynectus compressus Günther, Ann. Mag. Nat. Hist., II, 1878, 20, mid-Atlantic, at Challenger Station 107, in 1,500 fathoms.

2808. Bathyonus catena Goode & Bean.

Gulf Stream, at Albatross Station 2379, latitude 28° 00′ 15″ N., longitude, 87° 42′ W., in 1,467 fathoms.

Bathyonus catena Proc. U. S. Nat. Mus., VIII, 1885, 603, Gulf Stream.

Genus 933. PENOPUS Goode & Bean.

Penopus Goode & Bean, Ocean. Ichth., 335, 1896 (*macdonaldi*).

2809. Penopus macdonaldi Goode & Bean.

Gulf Stream.

Penopus macdonaldi Goode & Bean, Oceanic Ichth., 336, fig. 293, 1896, Gulf Stream, at Albatross Station 2716, 38° 29′ 30″ N., 70° 57′ W., in 1,631 fathoms.

Genus 934. BASSOGIGAS Gill.

Bassogigas Gill, in Goode & Bean, Ocean. Ichth., 328, 1896 (*gillii*).

2810. Bassogigas gillii Goode & Bean.

Off Cape Henlopen, Delaware.

Bassogigas gillii Goode & Bean, Ocean. Ichth., 328, fig. 291, 1896, off Cape Henlopen, Delaware, at Albatross Station 2684, in 1,106 fathoms.

Genus 935. NEOBYTHITES Goode & Bean.

Neobythites Goode & Bean, Proc. U. S. Nat. Mus. 1885, 600 (*gillii*).

2811. Neobythites stelliferoides Gilbert.

Gulf of California.

Neobythites stelliferoides Gilbert, Proc. U. S. Nat. Mus. 1890, 112, Gulf of California, at Albatross Station 2996, 24° 30′ 15″ N., 110° 29′ W., in 112 fathoms.

2812. Neobythites gillii Goode & Bean.

Gulf of Mexico.

Neobythites gillii Goode & Bean, Proc. U. S. Nat. Mus. 1885, 601, Gulf of Mexico, at Albatross Station 2402, 28° 36′ N., 85° 33′ W., in 111 fathoms.

2813. Neobythites marginatus Goode & Bean.

Off Barbados.

Neobythites marginatus Goode & Bean, Bull. Mus. Comp. Zool., XII, 162, 1883, off Barbados, in 209 fathoms.

Genus 936. BENTHOCOMETES Goode & Bean.

Benthocometes Goode & Bean, Ocean. Ichth., 327, 1896 (*robustus*).

2814. Benthocometes robustus (Goode & Bean).

West Indies, to latitude 39° N., in Gulf Stream.

Neobythites robustus Goode & Bean, Bull. Mus. Comp. Zool., XII, 161, 1883, off Moro Castle, Cuba.

Genus 937. POROGADUS Goode & Bean.

Porogadus Goode & Bean, Proc. U. S. Nat. Mus. 1885, 602 (*miles*).

2815. Porogadus miles Goode & Bean.

Atlantic Coast off Delaware Bay, in deep water.

Porogadus miles Goode & Bean, Proc. U. S. Nat. Mus. 1885, 602, at Albatross Station 2230, 38° 27′ N., 73° 2′ W., in 1,168 fathoms.

Genus 938. BASSOZETUS Gill.

Bassozetus Gill, Proc. U. S. Nat. Mus. 1883, 259 (*normalis*).

2816. Bassozetus catena Goode & Bean.

Gulf of Mexico, in deep water.

Bassozetus catena Goode & Bean, Proc. U. S. Nat. Mus. 1885, 603, at Albatross Station 2379, 28° 00′ 15″ N., 87° 42′ W., in 1,467 fathoms.

2817. Bassozetus normalis Gill.

West Indies, off Dominica to 40° north latitude, in region of Gulf Stream.

Bassozetus normalis Gill, Proc. U. S. Nat. Mus. 1883, 259, Gulf Stream, at Albatross Station 2042, 39° 33′ N., 68° 26′ 45″ W., in 1,555 fathoms.

2818. Bassozetus compressus Goode & Bean.

Gulf of Mexico, in deep water.

Bassozetus compressus Goode & Bean, Ocean. Ichth., 322, 1896, 28° 00′ 15″ N., 87° 42′ W., in 1,467 fathoms. (Günther, Ann. and Mag. Nat. Hist., II, 1878, 20, seems to be the original description.)

Genus 939. NEMATONUS Günther.

Nematonus Günther, Challenger Report, XXII, 114, 1887 (*pectoralis*).

2819. Nematonus pectoralis (Goode & Bean).

Gulf of Mexico, and off Dominica.

Bathyonus pectoralis Goode & Bean, Proc. U. S. Nat. Mus. 1885, 604, Albatross Station 2380, 28° 02′ 30″ N., 87° 43′ 45″ W., in 1,430 fathoms.

Genus 940. APHYONUS Günther.

Aphyonus Günther, Ann. Mag. Nat. Hist., II, 1878, 22 (*gelatinosus*).

2820. Aphyonus mollis Goode & Bean.

Gulf of Mexico, in deep water.

Aphyonus mollis Goode & Bean, Bull. Mus. Comp. Zool., XII, 163, 1883, Gulf of Mexico, at Blake Station 221, 24° 36′ N., 84° 5′ W., in 955 fathoms.

Genus 941. LUCIFUGA Poey.

Lucifuga Poey, Memorias, II, 95, 1860 (*subterraneus*).

2821. Lucifuga subterranea Poey. *Pez Ciego.*

Cuba.

Lucifuga subterraneus Poey, Memorias, II, 96, 1860, Caves of San Antonio in southern Cuba.

Genus 942. STYGICOLA Gill.

Stygicola Gill, Proc. Ac. Nat. Sci. Phila. 1863, 252 (*dentata*).

2822. Stygicola dentata Poey.

Caves in southern Cuba.

Lucifuga dentatus Poey, Memorias, II, 102, 1860, cave of Cajio, Cuba.

Moëbia fromelas Gilbert,

Bellatór egretta.

Suborder CRANIOMI.

Family CCXI. TRIGLIDÆ. The Gurnards.

Genus 943. PRIONOTUS Lacépède. *Gurnards.*
Prionotus Lacépède, Hist. Nat. Poiss., III, 37, 1802 (*evolans*).

2823. Prionotus birostratus Richardson.
Gulf of Fonseca, west coast of Central America.
Prionotus birostratus Richardson, Voy. Sulphur, Ichthyology, pt. II, 81, April, 1845, Gulf of Fonseca, west coast of Central America.

2824. Prionotus gymnostethus Gilbert.
Gulf of California.
Prionotus gymnostethus Gilbert, Proc. U. S. Nat. Mus. 1891, 559, Gulf of California, in shallow water.

2825. Prionotus xenisma Jordan & Bollman.
Pacific Ocean, off coast of Colombia.
Prionotus xenisma Jordan & Bollman, Proc. U. S. N. M. 1889, 169, Pacific Coast of Colombia.

2826. Prionotus loxias Jordan.
Pacific Coast of Central America.
Prionotus loxias Jordan, Proc. U. S. Nat. Mus. 1895, Pacific Ocean, south of Panama.

2827. Prionotus egretta Goode & Bean.
Barbados.
Prionotus egretta Goode & Bean, Oceanic Ichth., 465, 1896, off Barbados.

2828. Prionotus carolinus (Linnæus). *Common Gurnard.*
Cape Ann to South Carolina, chiefly northward.
Trigla carolina Linnæus, "Mantissa 176 ? 528" Carolina.

2829. Prionotus scitulus Jordan.
South Atlantic coast of United States, Beaufort to St. Augustine.
Prionotus scitulus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 288, Beaufort.

2830. Prionotus roseus Jordan & Evermann.
Gulf of Mexico; Tampa Bay; Pensacola.
Prionotus roseus Jordan & Evermann, Proc. U. S. Nat. Mus. 1886, 470, off Tampa Bay, Florida.

2831. Prionotus alatus Goode & Bean.
Off Charleston, South Carolina.
Prionotus alatus Goode & Bean, Bull. Mus. Comp. Zool., X, 210, 1883, deep sea off Charleston, South Carolina.

2832. Prionotus miles Jenyns.
Galapagos Islands.
Prionotus miles Jenyns, Zool. Beagle, Fishes, 29, pl. 6, 1842, Chatham Island, of the Galapagos Archipelago.

2833. Prionotus stephanophrys Lockington,
Deep water, off San Francisco, Point Reyes, and Monterey.
Prionotus stephanophrys Lockington, Proc. U. S. Nat. Mus. 1880, 529, Point Reyes, near San Francisco.

2834. Prionotus quiescens Jordan & Bollman.
Pacific Ocean, off the coast of Colombia; Gulf of California.
Prionotus quiescens Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 166, off Pacific Coast of Colombia.

2835. Prionotus albirostris Jordan & Bollman.
Pacific Ocean, off the coast of tropical America.
Prionotus albirostris Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 168, Pacific Ocean, off the coast of Colombia.

2836. Prionotus rubio Jordan. *Rubio Volador.*
West Indies.
Prionotus rubio Jordan, Proc. U. S. Nat. Mus. 1886, 50, Havana.

2837. Prionotus ophryas Jordan & Swain.
Gulf of Mexico, Snapper Banks, near Pensacola, Florida.
Prionotus ophryas Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 542, Snapper Banks, off Pensacola, Florida.

2838. Prionotus stearnsi Jordan & Swain.
Gulf of Mexico.
Prionotus stearnsi Jordan & Swain, Proc. U. S. Nat. Mus. 1884, 541, Pensacola

2839. Prionotus strigatus Cuvier & Valenciennes. *Red-winged Gurnard.*
Atlantic Coast of the Northern States, Cape Cod to Virginia.
Prionotus strigatus Cuv. & Val., Hist. Nat. Poiss., IV, 86, 1829, New York.

2840. Prionotus evolans Linnæus. *Striped Gurnard.*
South Atlantic Coast of United States.
Prionotus evolans Gill, Cat. Fish. East Coast N. Am., 21, 1861, name only.

2841. Prionotus punctatus Bloch.
West Indies and coast of South America.
Prionotus punctatus Bloch, Ichth., pl. 353, 1793, Martinique; on a drawing by Plumier.

2842. Prionotus beanii Goode.
Off Trinidad.
Prionotus beanii Goode, in Goode & Bean, Oceanic Ichth., 468, 1896, off Trinidad.

2843. Prionotus tribulus Cuvier & Valenciennes. *Big-headed Gurnard.*
South Atlantic Coast, from Long Island to Brazos.
Prionotus tribulus Cuvier & Valenciennes, Hist. Nat. Poiss., IV, 98, pl. 74, 1829, New York; Carolina.

2844. Prionotus horrens Richardson.
Pacific Coast of tropical America.
Prionotus horrens Richardson, Voy. Sulph., Ichth., 79, pl. 42, figs. 1–3, 1843, Gulf of Fonseca.

Genus 944. BELLATOR* Jordan & Evermann.
Bellator Jordan & Evermann, new genus (*militaris*).

2845. Bellator militaris (Goode & Bean).
Off Cape Catoche, Yucatan; Gulf of Mexico.
Prionotus militaris Goode & Bean, Ocean. Ichth., 464, figs. 380 and 384, 1896, off Cape Catoche, Yucatan.

Genus 945. CHELIDONICHTHYS Kaup.
Kaup, Archiv f. Naturgeschichte 1873, 87 (*hirundo*).

2846. Chelidonichthys pictipinnis (Kaup).
Barbados.
Chelidonichthys pictipinnis Kaup,† Archiv f. Naturg. 1873, 87, Barbados (?).

Genus 946. TRIGLA (Artedi) Linnæus. *Plated Gurnards.*
Trigla (Artedi) Linnæus, Syst. Nat., ed. x, 300, 1758 (*cuculus*).

2847. Trigla cuculus Linnæus. *Red Gurnard.*
Southern Europe. Said by Cuvier to have been brought once from New York by Milbert; record probably erroneous.
Trigla cuculus Linnæus, Syst. Nat., ed. x, 301, 1758, Mediterranean, in the open sea.

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* Distinguished by its greatly elongate dorsal spines.
† The type of this species examined by us seems to be inseparable from Chelidonichthys kumu of the South Pacific. It probably is not American.

Bellaloi signella,

Family CCXII. PERISTEDIIDÆ. The Deep-water Gurnards.

Genus 947. PERISTEDION Lacépède.
Peristidion Lacépède, Hist. Nat. Poiss., III, 368, 1802 (*malarmat* = *cataphracta*).

2848. Peristedion miniatum Goode.
Gulf Stream.
Peristedion miniatum Goode, Proc. U. S. Nat. Mus. 1880, 349, Gulf Stream, off Rhode Island.

2849. Peristedion longispatha Goode & Bean.
West Indies, off Cuba and Barbados.
Peristedium longispatha Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 166, 1886, off Havana.

2850. Peristedion gracile Goode & Bean.
Gulf of Mexico.
Peristedion gracile Goode & Bean, Ocean. Ichth., 473, 1896, Gulf of Mexico.

2851. Peristedion platycephalum Goode & Bean.
West Indies; Barbados.
Peristedion platycephalum Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 167, 1886, off Barbados.

Genus 948. VULSICULUS * Jordan & Evermann.
Vulsiculus Jordan & Evermann, new genus (*imberbis*).

2852. Vulsiculus imberbis (Poey).
Gulf of Mexico.
Prionotus imberbe Poey, Memorias, II, 367, 1861, Cuba.

Family CCXIII. CEPHALACANTHIDÆ. The Flying-Fish.

Genus 949. CEPHALACANTHUS Lacépède.
Cephalacanthus Lacépède, Hist. Nat. Poiss., III, 223, 1802 (*spinarella*).

2853. Cephalacanthus volitans (Linnæus). *Flying-robin; Mucielago; Volador; Batfish.*
Atlantic Ocean, on both coasts; also Gulf coasts.
Trigla volitans Linnæus, Syst. Nat., ed. X, I, 302, 1758; after Artedi.

Suborder DISCOCEPHALI.

Family CCXIV. ECHENEIDIDÆ. The Remoras.

Genus 950. PHTHEIRICHTHYS Gill.
Phtheirichthys Gill, Proc. Ac. Nat. Sci. Phila. 1862, 239 (*lineata*).

2854. Phtheirichthys lineatus (Menzies).
Tropical seas, ranging north to South Carolina and Pensacola.
Echeneis lineata Menzies, Trans. Linn. Soc. Lond. 1791, I, 187, pl. 17, fig. 1, Pacific Ocean, between the Tropics.

Genus 951. ECHENEIS (Artedi) Linnæus.
Echeneis (Artedi) Linnæus, Syst. Nat., ed. X, 260, 1758 (*naucrates*).

2855. Echeneis naucrates Linnæus. *Shark-sucker; Pega; Pegador; Sucking-fish.*
Warm seas, universally distributed; common north to Cape Cod and San Francisco.
Echeneis neucrates (misprint for *naucrates*) Linnæus, Syst. Nat., ed. X, 261, 1758, Pelago Indico.

2856. Echeneis naucrateoides Zuieuw.
Cape Cod to West Indies; common on our South Atlantic Coast.
Echeneis naucrateoides Zuieuw, Nova Acta Ac. Sci. Imp. Petropol., IV, 279.

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* Distinguished by its very minute barbel, easily overlooked.

Genus 952. REMILEGIA Gill.

Remilegia Gill, Proc. Ac. Nat. Sci. Phila. 1864, 61 (*australis*).

2857. Remilegia australis (Bennett).

Tropical seas; recorded by Dr. Lütken, from 10° N., 39° W.
Echeneis australis Bennett, Nar. Whaling Voyage, II, 273, pls. 24-26, 1840.

Genus 953. REMORA Gill.

Remora Gill, Proc. Ac. Nat. Sci. Phila. 1862, 239 (*remora*).

Subgenus REMORA Gill.

2858. Remora remora (Linnæus). *Remora.*

Warm seas, north to New York and San Francisco.
Echeneis remora Linnæus, Syst. Nat., ed. x, 260, 1758, Pelago Indico.

Subgenus REMORINA* Jordan & Evermann.

Remorina, Jordan & Evermann, new subgenus (*albescens*).

2859. Remora albescens (Temminck & Schlegel).

Tropical Pacific, straying to America; a specimen taken at La Paz, Gulf of California.
Echeneis albescens Temminck & Schlegel, Fauna Japonica, Poiss., 272, pl. 120, fig. 3, 1842, Japan, no definite locality.

Subgenus REMOROPSIS Gill.

Remoropsis Gill, Proc. Ac. Nat. Sci. Phila. 1864, 60 (*brachyptera*).

2860. Remora brachyptera (Lowe).

Warm seas, occasionally north to Cape Cod.
Echeneis brachyptera Lowe, Proc. Zool. Soc. Lond. 1839, 89, Madeira.

Genus 954. RHOMBOCHIRUS Gill.

Rhombochirus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 88 (*osteochir*).

2861. Rhombochirus osteochir (Cuvier).

West Indies, north to Cape Cod.
Echeneis osteochir Cuvier, Règne Animal, ed. 2, II, 348, 1829, no locality given.

Suborder TÆNIOSOMI. The Ribbon-Fishes.

Family CCXV. TRACHYPTERIDÆ. The King of the Herrings.

Genus 955. TRACHYPTERUS Gouan.

Trachypterus Gouan, Hist. Nat. Poiss., 104, 1770 (*trachyrhynchus*).

2862. Trachypterus rex-salmonorum Jordan & Gilbert.

Off coast of California.
Trachypterus rex-salmonorum Jordan & Gilbert, Proc. Cal. Ac. Sci. 1894, 145, pl. 9, open sea, outside Bay of San Francisco.

Family CCXVI. REGALECIDÆ.

Genus 956. REGALECUS Ascanius.

Regalecus Ascanius, Icones Rerum Naturalium, pl. 11, 1772 (*glesne*).

2863. Regalecus glesne Ascanius.

Sea off Bergen, Norway.
Regalecus glesne Ascanius, Icones Rerum Nat., 2d Cayer, pl. 11, 1772, sea off Bergen, Norway.

Family CCXVII. STYLEPHORIDÆ.

Genus 957. STYLEPHORUS Shaw.

Stylephorus Shaw, Trans. Linn. Soc. Lond., I, 1791, 90 (*chordatus*).

2864. Stylephorus chordatus Shaw.

Atlantic, between Cuba and Martinique.
Stylephorus chordatus Shaw, Trans. Linnæan Soc., I, 1791, 92, pl. 6, Atlantic, between Cuba and Martinique.

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* Distinguished by the fin rays.

Tracheopteris trichomanes Pacz.

Gobiesox lindei Richardson.
near capholus.

Suborder XENOPTERYGII. The Cling-Fishes.

Family CCXVIII. GOBIESOCIDÆ. Cling-Fishes.

Genus 958. **CAULARCHUS** Gill.

Caularchus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 330 (*mœandricus*).

2865. **Caularchus mæandricus** (Girard). *Suckfish.*

Pacific Coast of United States, from Vancouver Island to Monterey.

Lepidogaster mœandricus Girard, Pac. R. R. Surv., x, 130, 1858, San Luis Obispo, California, and the Farallones.

Genus 959. **BRYSSETÆRES** Jordan & Evermann.

Bryssetæres Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 230 (*pinniger*).

2866. **Bryssetæres pinniger** (Gilbert).

Gulf of California; known from Puerto Refugio (Angel Island), San Luis Gonzales Bay, and La Paz.

Gobiesox pinniger Gilbert, Proc. U. S. Nat. Mus. 1890, 94, Puerto Refugio, Gulf of California.

Genus 960. **GOBIESOX** Lacépède. *Clingfishes.*

Gobiesox Lacépède, Hist. Nat. Poiss., II, 595, 1799 (*cephalus*).

Subgenus **CAULISTIUS** Jordan & Evermann.

Caulistius Jordan & Evermann, new subgenus (*papillifer*).

2867. **Gobiesox papillifer** Gilbert.

Magdalena Bay, Lower California.

Gobiesox papillifer Gilbert, Proc. U. S. Nat. Mus. 1890, 96, Magdalena Bay, Lower California.

Subgenus **GOBIESOX** Lacépède.

2868. **Gobiesox gyrinus** Jordan & Evermann.

West Indies.

Gobiesox gyrinus Jordan & Evermann, Fishes North and Middle America, 1896, Cordova.

2869. **Gobiesox nigripinnis** Peters.

Puerto Cabello, near Aspinwall.

Gobiesox nigripinnis Peters, Berliner Monatsber. 1859, 412, Puerto Cabello, near Aspinwall.

2870. **Gobiesox cephalus** Lacépède. *Tétard; Testar.*

West Indies.

Gobiesox cephalus Lacépède, Hist. Nat. Poiss., II, 595, 1798, Martinique.

2871. **Gobiesox strumosus** Cope.

South Atlantic Coast, South Carolina to Florida.

Gobiesox strumosus Cope, Proc. Ac. Nat. Sci. Phila. 1870, 121, Hilton Head, South Carolina.

2872. **Gobiesox virgatulus** Jordan & Gilbert.

From Pensacola Bay north to Charleston, South Carolina.

Gobiesox virgatulus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 293, Pensacola, Florida.

2873. **Gobiesox adustus** Jordan & Gilbert.

Pacific coast of Mexico at Mazatlan.

Gobiesox adustus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 360, Mazatlan, Mexico.

2874. **Gobiesox funebris** Gilbert.

Gulf of California; Puerto Refugio (Angel Island) and La Paz.

Gobiesox funebris Gilbert, Proc. U. S. Nat. Mus. 1890, 95, Puerto Refugio, Gulf of California.

2875. **Gobiesox pœcilophthalmus** Jenyns.

Chatham Island, Galapagos Archipelago.

Gobiesox pœcilophthalmus Jenyns, Voy. Beagle, Fishes, 141, 1842, Chatham Island.

2876. Gobiesox rhodospilus Günther.
Panama.
Gobiesox rhodospilus Günther, Proc. Zool. Soc. Lond. 1864, 25, Panama.

2877. Gobiesox macrophthalmus Günther.
Probably West Indies.
Gobiesox macrophthalmus Günther, Cat., III, 502, 1861, locality unknown.

2878. Gobiesox cerasinus Cope.
St. Martins, West Indies.
Gobiesox cerasinus Cope, Trans. Amer. Philos. Soc., XIV, 1871, 473, St. Martins, West Indies.

Subgenus SICYASES Müller & Troschel.
Sicyases Müller & Troschel.

2879. Gobiesox erythrops Jordan & Gilbert.
Mazatlan; also Tres Marias Islands.
Gobiesox erythrops Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 360, Mazatlan, Mexico.

2880. Gobiesox rubiginosus (Poey).
Matanzas, Cuba.
Licejosus rubiginosus Poey, Synopsis, 391, 1868, wharves of Palmasola, Matanzas, Cuba.

2881. Gobiesox carneus (Poey).
Matanzas, Cuba.
Sicyases carneus Poey, Syn., 392, 1868, wharf of Palmasola, Matanzas, Cuba.

2882. Gobiesox hæres Jordan & Bollman.
Green Turtle Cay, Bahamas.
Gobiesox hæres Jordan & Bollman, Proc. U. S. Nat. Mus. 1888, 552, Green Turtle Cay, Bahamas.

2883. Gobiesox punctulatus (Poey).
Cuba.
Sicyases punctulatus Poey, Enumeratio, 124, 1875, Havana.

2884. Gobiesox fasciatus (Peters).
Puerto Cabello, near Aspinwall.
Sicyases fasciatus Peters, Monatsber. Berl. Ac. 1859, 412, Puerto Cabello.

Genus 961. RIMICOLA Jordan & Evermann.
Rimicola Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 231 (*muscarum*).

2885. Rimicola muscarum (Meek & Pierson).
Monterey Bay, California.
Gobiesox muscarum Meek & Pierson, Proc. Cal. Ac. Sci. 1895, 571, pl. 71, Monterey Bay, California.

2886. Rimicola eigenmanni (Gilbert).
Point Loma, near San Diego, California.
Gobiesox eigenmanni Gilbert, Proc. U. S. Nat. Mus. 1890, 96, Point Loma, near San Diego, California.

Genus 962. ARBACIOSA Jordan & Evermann.
Arbaciosa Jordan & Evermann, Proc. Cal. Ac. Sci. 1896, 290 (*zebra*).

2887. Arbaciosa rhessodon (Rosa Smith).
San Diego to the northern part of the Gulf of California.
Gobiesox rhessodon Rosa Smith, Proc. U. S. Nat. Mus. 1881, 140, San Diego, California.

2888. Arbaciosa humeralis (Gilbert).
Gulf of California; Puerto Refugio, Angel Island; La Paz.
Gobiesox humeralis Gilbert, Proc. U. S. Nat. Mus. 1890, 95, Puerto Refugio, Gulf of California.

2889. Arbaciosa rupestris (Poey).
Coral reefs of Cuba.
Gobiesox rupestris Poey, Memorias, II, 283, 1861, Cuba.

Gobiesox androsiensis Rosen Lund Mus.
Andros.

2890. Arbaciosa zebra (Jordan & Gilbert).
Mazatlan, Mexico.
Gobiesox zebra Jordan & Gilbert, Proc. U. S. N. M. 1881, 395, Mazatlan, Mexico.

2891. Arbaciosa eos (Jordan & Gilbert).
Pacific Coast of Mexico.
Gobiesox eos Jordan & Gilbert, Proc. U. S. N. M. 1881, 360, Mazatlan, Mexico.

Suborder ANACANTHINI. The Jugular Fishes.

Family CCXIX. MERLUCCIIDÆ. The Hakes.

Genus 963. MERLUCCIUS Rafinesque.
Merluccius Rafinesque, Carrat. di Alc. Nuovi Gen., etc., 25, 1810 (*smiridus*).

2892. Merluccius bilinearis (Mitchill).
Coast of New England and northward.
Stomodon bilinearis Mitchill, Rept. Fish. N. Y., 7, 1814, New York.

2893. Merluccius merluccius (Linnæus).
Coasts of Europe, straying to Greenland.
Gadus merluccius Linnæus, Syst. Nat., ed. x, 254, 1758, no locality.

2894. Merluccius productus (Ayres).
Pacific Coast, from Santa Barbara northward.
Merlangus productus Ayres, Proc. Cal. Ac. Sci. 1855, 64, no locality given; types from San Francisco market, probably from San Francisco Bay.

Family CCXX. GADIDÆ.

Genus 964. BOREOGADUS Günther.
Boreogadus Günther, Cat., IV, 336, 1862 (*fabricii*).

2895. Boreogadus saida (Lepechin).
Arctic seas, Greenland to Alaska and northern Russia; common in the far North.
Gadus saida Lepechin, Nov. Comm. Ac. Scient. Petrop. 1774, 512.

Genus 965. POLLACHIUS Nilsson. *Pollacks.*
Pollachius Nilsson, in Bonaparte, Cat. Met. Pesci Europ., 45, 1846 (*pollachius*).

2896. Pollachius chalcogrammus (Pallas).
North Pacific, south to Sitka.
Gadus chalcogrammus Pallas, Zoogr. Rosso-Asiat., III, 198, 1811, Kamchatka.

2897. Pollachius fucensis Jordan & Gilbert.
Puget Sound.
Pollachius fucensis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1883, 315, Puget Sound at Tacoma, Washington.

2898. Pollachius virens (Linnæus). *Pollack; Coalfish; Green-cod.*
North Atlantic; common northward on both coasts, south to Cape Cod.
Gadus virens Linnæus, Syst. Nat., ed. x, 253, 1758, ocean, off Europe.

Genus 966. ELEGINUS Fischer.
Eleginus Fischer, Mém. Soc. Nat. Moscow, v, 4, 2d ed., 252–257, 1813 (*navaga*).

2899. Eleginus navaga Kölreuter.
Gadus navaga Kölreuter, Nov. Comm. Acad. Petrop., XIV, 1770, 484, pl. 12, coast of northern Russia.

Genus 967. MICROGADUS Gill. *Tomcods.*
Microgadus Gill, Proc. Ac. Nat. Sci. Phila. 1865, 69 (*proximus*).

2900. Microgadus proximus (Girard). *California Tomcod.*
West coast of North America, from Monterey to Alaska.
Gadus proximus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 141, San Francisco.

2901. Microgadus tomcod (Walbaum). *Tomcod; Frostfish.*
East coast of North America, from Virginia to Labrador.
Gadus tomcod Walbaum, Artedi Pisc., 133, 1792, Long Island; after Schöpf.

Genus 968. GADUS (Artedi) Linnæus. *Codfishes.*

Gadus (Artedi) Linnæus, Syst. Nat., ed. x, 251, 1758 (*callarias*).

2902. Gadus ogac Richardson.

Godhavn, Greenland.

Gadus ogac Richardson, Faun. Bor.-Amer., III, 246, 1836, no locality.

2903. Gadus callarias Linnæus. *Common Codfish.*

North Atlantic, south to Virginia.

Gadus callarias Linnæus, Syst. Nat., ed. x, 252, 1758, Baltic Sea and ocean off Europe.

2904. Gadus macrocephalus Tilesius. *Pacific Cod.*

Bering Sea, south to coast of Oregon.

Gadus macrocephalus Tilesius, Mém. Ac. Sci. St. Petro., II, 1810, 360, Bering Sea.

Genus 969. MELANOGRAMMUS Gill. *Haddocks.*

Melanogrammus Gill, Proc. Ac. Nat. Sci. Phila. 1862, 280 (*æglifinus*).

2905. Melanogrammus æglifinus (Linnæus).

North Atlantic, on both coasts.

Gadus æglifinus Linnæus, Syst. Nat., ed. x, 251, 1758, and ed. XII, 435, 1766, ocean off Europe.

Genus 970. LEPIDION Swainson.

Lepidion Swainson, Nat. Hist. Class. Fishes, II, 1839.

2906. Lepidion verecundum Jordan & Cramer.

Off coast of Lower California.

Lepidion verecundum Jordan & Cramer, Proc. U. S. Nat. Mus. 1896, Clarion Island, Mexico.

Genus 971. ANTIMORA Günther.

Antimora Günther, Ann. Mag. Nat. Hist. 1876, 2 (*rostrata*).

2907. Antimora viola (Goode & Bean).

Banks of Newfoundland and southward.

Haloporphyrus viola Goode & Bean, Proc. U. S. Nat. Mus. 1878, 256, Le Have Bank, in 400 fathoms.

2908. Antimora microlepis Bean.

Pacific Ocean, off Queen Charlotte Islands.

Antimora microlepis Bean, Proc. U. S. Nat. Mus. 1890, 38, latitude 51° 00′ 23″ N., longitude 130° 34′ W., off Cape St. James, Queen Charlotte Islands, in 875 fathoms.

Genus 972. PHYSICULUS Kaup.

Physiculus Kaup, Wiegmann's Archiv 1858, 88 (*dalwigkii*).

2909. Physiculus fulvus Bean.

Caribbean Sea and north in the Gulf Stream to latitude 35°.

Physiculus fulvus Bean, Proc. U. S. Nat. Mus. 1884, 240, 40° 1′ N., 69° 56′ W., 79 fathoms.

Genus 973. LOTELLA Kaup.

Lotella Kaup, Wiegmann's Archiv, I, 1858, 88 (*schlegeli*).

2910. Lotella maxillaris Bean.

Gulf Stream.

Lotella maxillaris Bean, Proc. U. S. Nat. Mus. 1884, 241, latitude 39° 55′ N., longitude 70° 28′ W., in 396 fathoms.

2911. Lotella nematopus (Gilbert).

On both coasts of Lower California, in deep water.

Physiculus nematopus Gilbert, Proc. U. S. Nat. Mus. 1890, 114, on both coasts of Lower California, at Albatross Stations 2997, 3011, 3015, and 3016, in 71 to 221 fathoms.

2912. Lotella kaupi (Poey.)

Cuba.

Physicula kaupi Poey, Repertorio, I, 186, 1865, Matanzas, Cuba.

? Gadus ruber Lac. - rgac.

Order
Chondrobrachia for Alectopus
(Podalcles) Regan
Proc. Zoeuth Intern
Sci Congr. 1910.

2913. Lotella rastrelliger (Gilbert).

On both coasts of Lower California, in deep water.

Physiculus rastrelliger Gilbert, Proc. U. S. Nat. Mus. 1890, 113, on both coasts of Lower California, at Albatross Stations 2987 and 3045, in 171 and 184 fathoms.

Genus 974. URALEPTUS Costa.

Uraleptus Costa, Wiegmann's Archiv 1858, 87 (*maraldi*).

2914. Uraleptus maraldi (Risso).

Nice; Madeira; Naples and Catania; also off island of Nevis, in the West Indies.

Gadus maraldi Risso, Ichth. Nice, 123, 1810, pl. 6, fig. 13, Nice.

Genus 975. LOTA Cuvier. *Burbots.*

Lota Cuvier, Règne Animal, ed. 1, II, 215, 1817 (*lota*).

2915. Lota maculosa (LeSueur). *Burbot; Lake Lawyer; Ling; Alekey Trout.*

New England and Great Lakes region, north to the Arctic seas, and west to the upper Missouri and Columbia River basins.

Gadus maculosus LeSueur, Jour. Ac. Nat. Sci. Phila., I, 83.

Genus 976. MOLVA Nilsson. *Lings.*

Molva Nilsson, Skandinav. Fauna, IV, 573, 1832 (*molva*).

2916. Molva molva (Linnæus).

Spitzbergen to Gulf of Gascon; Arcachon; San Juan de Luz; Iceland, Greenland; Faröe Islands.

Gadus molva Linnæus, Syst. Nat., ed. x, 254, 1758, and ed. XII, 439, 1766, no locality.

Rafinesque 1793, not preoc.

Genus 977. PHYCIS Bloch & Schneider. *Codlings.* preoc.

Phycis Bloch & Schneider, Syst. Ichth., 56, 1801 (*tinca*). UROPHYCIS &c.

2917. Phycis regius (Walbaum). β Emphycus Goode

North Atlantic, south to Cape Fear.

Blennius regius Walbaum, Artedi Pisc., 186, 1792, no locality.

2918. Phycis cirratus Goode & Bean.

Deep waters of the Gulf of Mexico.

Phycis cirratus Goode & Bean, Ocean. Ichth., 358, 1896, Gulf of Mexico, at 29° 03′ 15″ N., 88° 16′ W.

2919. Phycis floridanus Bean & Dresel.

Pensacola, Florida.

Phycis floridanus Bean & Dresel, Proc. Biol. Soc. Wash. 1884, 100, Pensacola.

2920. Phycis earlli Bean.

Charleston, South Carolina.

Phycis earlli Bean, Proc. U. S. Nat. Mus., III, 1880, 69, Charleston, S. C.

2921. Phycis tenuis (Mitchill).

North Atlantic, south to Virginia; abundant northward.

Gadus tenuis Mitchill, Trans. Lit. and Phil. Soc. N. Y., I, 1815, 371, New York.

2922. Phycis chuss (Walbaum).

Atlantic Coast, chiefly northward.

Blennius chuss Walbaum, Artedi Pisc., 186, 1792, no locality.

2923. Phycis chesteri Goode & Bean.

Off Massachusetts, in deep water.

Phycis chesteri Goode & Bean, Proc. U. S. Nat. Mus. 1878, 256, off Cape Ann, in 140 fathoms.

Genus 978. LÆMONEMA Günther.

Læmonema Günther, Cat., IV, 356, 1862 (*yarrellii*).

2924. Læmonema barbatulum Goode & Bean.

Gulf Stream.

Læmonema barbatula Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 204, 1883, Gulf Stream, in 32° 43′ 25″ N., 77° 20′ 30″ W., in 230 fathoms, and 28° 35′ N., 73° 13′ W.

2925. Læmonema melanurum Goode & Bean.

Caribbean Sea, north to New York.

Læmonema melanurum Goode & Bean, Ocean. Ichth., 363, 1896, 30° 44′ N., 79° 26′ W., in 440 fathoms.

Genus 979. GAIDROPSARUS Rafinesque. *Rocklings.*

Gaidropsarus Rafinesque, Indice d'Itt. Sic., 11, 1810 (*mustellaris* = *mediterraneus*).

2926. Gaidropsarus reinhardti (Kröyer).

Greenland and east coast of United States.

Motella reinhardti Kröyer (MS.), 1852, Greenland.

2927. Gaidropsarus ensis (Reinhardt).

New York to Greenland.

Motella ensis Reinhardt, Dansk. Vidensk. Selsk. Afh., VII, 15, 1838, Greenland.

2928. Gaidropsarus septentrionalis (Collett).

Coasts of Norway and Greenland.

Motella septentrionalis Collett, Ann. Mag. Nat. Hist., 15, 82, 1874, Florö, Bergen, coast of Norway.

Genus 980. RHINONEMUS Gill.

Rhinonemus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 241 (*cimbrius*).

2929. Rhinonemus cimbrius (Linnæus).

Gadus cimbrius Linnæus, Syst. Nat., ed. XII, 440, 1766, no locality.

Genus 981. BROSMIUS Cuvier. BROSME

Brosmius Cuvier, Règne Animal, ed. 1, II, 222, 1817 (*brosme*).

2930. Brosmius brosme (Müller).

Polar regions, south to Cape Cod.

Gadus brosme Müller, Prodr. Zool. Dan., 41, 1776, no locality.

Family CCXXI. MACRURIDÆ. The Grenadiers.

Genus 982. LIONURUS Günther.

Lionurus Günther, Challenger Rept., XXII, 141, 1887 (*filicauda*).

2931. Lionurus filicauda Günther.

Antarctic Ocean and deep sea, off both coasts of South America.

Coryphænoides filicauda Günther, Ann. Mag. Nat. Hist. 1878, 27, Antartic Ocean at Challenger Stations 157, 299, and 325.

2932. Lionurus liolepis Gilbert.

Off coast of southern California, in deep water.

Macrurus (*Lionurus*) *liolepis* Gilbert, Proc. U. S. Nat. Mus., XIII, 1890, 117, coast of California, at Albatross Station 2980, 33° 49′ 45″ N., 119° 24′ 30″ W., in 600 fathoms.

Genus 983. HYMENOCEPHALUS Giglioli.

Hymenocephalus Giglioli, Pelagos, Genoa, 228, 1884 (*italicus*).

2933. Hymenocephalus cavernosus (Goode & Bean).

Gulf of Mexico, in deep water.

Bathygadus cavernosus Goode & Bean, Proc. U. S. N. M. 1885, 598, Albatross Station 2398, at lat. 28° 45′ N., long. 86° 26′ W., in 227 fathoms.

2934. Hymenocephalus goodei (Günther).

Gulf Stream, south of New England, in deep water.

Macrurus goodei Günther, Challenger Rept., XXII, 136, 1887, between latitude 40° and 41° N. and longitude 66° and 68° W., in 304 to 1,242 fathoms.

Genus 984. BATHYGADUS Günther.

Bathygadus Günther, Ann. Mag. Nat. Hist. 1878, 23 (*cottoides*).

2935. Bathygadus favosus Goode & Bean.

Off Martinique, in deep water.

Bathygadus favosus Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 160, 1886, off Martinique, at Blake Station 80, in 472 fathoms.

Enchelyopus = Rhinonemus

BROSME Oken Lois. 1817. 1182.
Cuvier says "Les Brosmes".

~~Trachymacrus~~ Enchelyopus Gilbert
Steindachneria argentea Goode.

omit, not N. Amer.

hematonemus goodei
Nematonemus urbortelatus Gill & Bransford
~~Nematonemus~~ cyclolepis Gilbert.
Moseleya

a Lastel

M. hulstrachyp Rhéd
Collett. 85.

M. leptuncus Gill & Townsend (= M. tosalis
G & T.) Pribilof Is: close to M. acrolep

M. accidentalis G & B

Albatrossia ~~Lepa~~ pectoralis (= M. magnus G & T
Pribilof

Bogoslovius clarki G & T. Bering Sea.
Bogoslovius firmisquamis G & T,
Bering Sea

2936. Bathygadus arcuatus Goode & Bean.

Gulf of Mexico, in deep water.

Bathygadus arcuatus Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 158, 1886, off Martinique, in 334 fathoms.

2937. Bathygadus longifilis Goode & Bean.

Deep waters of the Gulf of Mexico.

Bathygadus longifilis Goode & Bean, Proc. U. S. Nat. Mus. 1885, 599, Gulf of Mexico, at Albatross Station 2392, latitude 28° 47′ 30″ N., longitude 87° 27′ W., in 724 fathoms.

2938. Bathygadus macrops Goode & Bean.

Deep waters of the Gulf of Mexico.

Bathygadus macrops Goode & Bean, Proc. U. S. N. M. 1885, 598, at Albatross Station 2396, in latitude 28° 34′ N., longitude 86° 48′ W., in 335 fathoms.

Genus 985. MACROURUS Bloch.

Macrourus Bloch, Ichth., V, 152, 1787 (*rupestris*).

2939. Macrourus berglax Lacépède.

Massachusetts to Greenland and Norway.

Macrourus berglax Lacépède, Hist. Nat. Poiss., III, 170, 1800, Greenland.

2940. Macrourus acrolepis Bean.

Straits of Juan de Fuca.

Macrourus acrolepis Bean, Proc. U. S. N. M. 1883, 362, Straits of Juan de Fuca.

2941. Macrourus bairdi Goode & Bean.

West Indies to Massachusetts Bay.

Macrourus bairdi Goode & Bean, Amer. Jour. Sci. Arts. 1877, 471, Massachusetts Bay.

2942. Macrourus stelgidolepis Gilbert.

Pacific Ocean, off Point Conception.

Macrurus (*Macrurus*) *stelgidolepis* Gilbert, Proc. U. S. Nat. Mus. 1890, 116, Albatross Station 2960, 34° 10′ 45″ N., 120° 16′ 45″ W., in 267 fathoms.

2943. Macrourus cinereus Gilbert.

North Pacific and Bering Sea.

Macrourus cinereus Gilbert, Rept. U. S. Fish Com. 1893 (1896), 457, at Albatross Stations 3307, 3329, and 3340, latitude 54° to 55° N. and longitude 155° to 171° W., in 399 to 1033 fathoms.

Genus 986. MALACOCEPHALUS Günther.

Malacocephalus Günther, Cat., IV, 396, 1862 (*lævis*).

2944. Malacocephalus pectoralis Gilbert.

Off the coast of Oregon.

Macrourus (*Malacocephalus*) *pectoralis* Gilbert, Proc. U. S. Nat. Mus. 1891, 563, off the coast of Oregon, at Albatross Stations 3071, 3074, and 3075, in 685 to 877 fathoms.

Genus 987. CŒLORHYNCHUS Giorna.

Cœlorhynchus Giorna, Mém. Ac. Sci. Turin, XVI, 1803, 178, pl. 1, figs. 3 and 4 (*La Ville* L., *Cœlorhynchus* Risso).

2945. Cœlorhynchus carminatus (Goode).

Caribbean Sea, north in the Gulf Stream to Long Island.

Macrourus carminatus Goode, Proc. U. S. Nat. Mus. 1880, 346, Gulf Stream, 40° 02′ 54″ N., 70° 23′ 40″ W., in 115 fathoms.

2946. Cœlorhynchus occa (Goode & Bean).

Gulf of Mexico, in deep water.

Macrourus occa Goode & Bean, Proc. U. S. Nat. Mus. 1885, 595, Gulf of Mexico, 28° 34′ N., 86° 48′ W., in 335 fathoms.

2947. Cœlorhynchus caribbeus (Goode & Bean).

West Indies, to northern part of Gulf of Mexico.

Macrourus caribbeus Goode & Bean, Proc. U. S. Nat. Mus. 1885, 594, northern part of Gulf of Mexico, in 210 fathoms.

2948. Cœlorhynchus scaphopsis Gilbert.

Gulf of California, in deep water.

Macrurus (*Cœlorhynchus*) *scaphopsis* Gilbert, Proc. U. S. Nat. Mus. 1890, 115, Gulf of California, at Albatross Station 3015, latitude 29° 19′ N., longitude 112° 50′ W., in 145 fathoms.

Genus 988. TRACHYRHYNCHUS Giorna.

Trachyrhynchus Giorna, Mém. Ac. Sci. Turin, XVI, 1803, 178.

2949. Trachyrhynchus helolepis Gilbert.

Off the coast of Central America.

Trachyrhynchus helolepis Gilbert, Proc. U. S. Nat. Mus. 1891, 562, west coast of Central America, at Albatross Station 2818, in deep water.

Genus 989. CORYPHÆNOIDES Gunner.

Coryphænoides Gunner, Trondhj. Selsk. Skrift., III, 50, 1765 (*rupestris*).

2950. Coryphænoides rupestris Gunner.

Banks of Newfoundland to Norway.

Coryphænoides rupestris Gunner, Trondhj. Selsk. Skrift., III, 50, 1765.

2951. Coryphænoides carapinus Goode & Bean.

Gulf Stream.

Coryphænoides carapinus Goode & Bean, Bull. Mus. Comp. Zool., vol. X, No. 5, 197, 1883, Gulf Stream, latitude 40°, in deep water.

Genus 990. CHALINURA Goode & Bean.

Chalinura Goode & Bean, Bull. Mus. Comp. Zool., vol. X, No. 5, 198, 1883 (*simula*).

2952. Chalinura simula Goode & Bean.

Gulf Stream.

Chalinura simula Goode & Bean, Bull. Mus. Comp. Zool. X, No. 5, 199, 1883, Gulf Stream, about latitude 40°.

2953. Chalinura serrula Bean.

East of Prince of Wales Island, in deep water.

Chalinura serrula Bean, Proc. U. S. Nat. Mus. 1890, 37, east of Prince of Wales Island, at Albatross Station 2859, in 1,569 fathoms.

2954. Chalinura filifera Gilbert.

Off Queen Charlotte Island, in deep water.

Chalinura filifera Gilbert, Rept. U. S. Fish Com. 1893 (1896), 458, off Queen Charlotte Island, at Albatross Station 3342.

Genus 991. NEMATONURUS Günther.

Nematonurus Günther, Challenger Report, XXII, 124 and 150, 1887 (*armatus*).

2955. Nematonurus gigas (Vaillant).

Atlantic and Pacific oceans.

Coryphænoides gigas Vaillant, Expd. Sci. Travailleur et Talisman, 232, pl. XX, fig. 2, 1888, off the Azores in 2,000 fathoms.

Family CCXXII. BREGMACEROTIDÆ.

Genus 992. BREGMACEROS (Cantor) Thompson.

Bregmaceros (Cantor) Thompson, in Charlesworth's Mag. Nat. Hist. 1840, 184 (*macclellandii*).

2956. Bregmaceros macclellandii Cantor.

South Pacific and Indian oceans; also off coast of Panama.

Bregmaceros macclellandii Cantor MS., Thompson, in Charlesworth's Mag Nat. Hist. 1840, figure 185, India.

2957. Bregmaceros atlanticus Goode & Bean.

Blake Stations 99 off Granada, and 113 off Nevis; also Station 185.

Bregmaceros atlanticus Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 165, 1886, off Nevis.

Bogzalg.

Chalmuga clapii Bogzalg.

Nannaloquus { Seebohelales as genuine
" { ~~[illegible]~~
goodae

B. brittyanus.

Bre

Hippoglossoides hamilton.
Stump; near the next.

H. robustus Gill & Jordan
(near St Paul's).

Order CC. HETEROSOMATA. The Flatfishes.

Family CCXXIII. PLEURONECTIDÆ. The Flounders.

Genus 993. ATHERESTHES Jordan & Gilbert.

Atheresthes Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 51 (*stomias*).

2958. Atheresthes stomias (Jordan & Gilbert). *Arrow-Toothed Halibut.*

San Francisco to Alaska.

Platysomatichthys stomias Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 301, off San Francisco.

Genus 994. REINHARDTIUS Gill.

Reinhardtius Gill, Cat. E. C. Fishes, 50, 1861 (*hippoglossoides*).

2959. Reinhardtius hippoglossoides (Walbaum). *Greenland Halibut.*

Arctic parts of the Atlantic, south to Finland and Grand Banks.

Pleuronectes cynoglossus Fabricius, Fauna Grœnlandica, 163, 1780, Greenland; not of Linnæus.

Genus 995. HIPPOGLOSSUS Cuvier.

Hippoglossus Cuvier, Règne Animal, ed. 1, II, 221, 1817 (*hippoglossus*).

2960. Hippoglossus hippoglossus (Linnæus). *Halibut.*

All northern seas, southward in deep waters to France, Sandy Hook, and San Francisco.

Pleuronectes hippoglossus Linnæus, Syst. Nat., ed. x, 269, 1758, European Ocean.

Genus 996. LYOPSETTA Jordan & Goss.

Lyopsetta Jordan & Goss, in Jordan, Cat. Fish. N. A., 135, 1885 (*exilis*).

2961. Lyopsetta exilis (Jordan & Gilbert).

North Pacific, in rather deep water; San Francisco to Alaska.

Hippoglossoides exilis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 154, off San Francisco, between the Golden Gate and Point Reyes.

Genus 997. EOPSETTA Jordan & Goss.

Eopsetta Jordan & Goss, in Jordan, Cat., 135, 1885 (*jordani*).

2962. Eopsetta jordani (Lockington). *California Sole.*

West coast of United States, from Puget Sound to Monterey.

Hippoglossoides jordani Lockington, Proc. U. S. Nat. Mus. 1879, 73, San Francisco.

Genus 998. HIPPOGLOSSOIDES Gottsche.

Hippoglossoides Gottsche, Wiegmann's Archiv 1835, 164 ("*lamanda*"=*platessoides*).

2963. Hippoglossoides platessoides (Fabricius).

North Atlantic, south to Cape Cod, and coasts of England and Scandinavia.

Pleuronectes platessoides Fabricius, Fauna Grœnlandica, 164, 1780, Greenland.

2964. Hippoglossoides elassodon Jordan & Gilbert.

Puget Sound and northward.

Hippoglossoides elassodon Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 278, Puget Sound, at Seattle and Tacoma, Washington.

Genus 999. PSETTICHTHYS Girard.

Psettichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 140 (*melanostictus*).

2965. Psettichthys melanostictus Girard.

Pacific Coast of North America, from Alaska south to Monterey.

Psettichthys melanostictus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 140, San Francisco; Astoria, Oregon.

Genus 1000. **HIPPOGLOSSINA** Steindachner.

Hippoglossina Steindachner, Ichth. Beitr., v, 13, 1876 (*macrops*).

2966. Hippoglossina macrops Steindachner.

Pacific Coast of Mexico, Mazatlan.

Hippoglossina macrops Steindachner, Ichth. Beitr., v, 13, pl. 3, 1876, Mazatlan.

2967. Hippoglossina stomata Eigenmann & Eigenmann.

Off San Diego, California.

Hippoglossina stomata Eigenmann & Eigenmann, Proc. Cal. Ac. Sci. 1890, 22, San Diego.

2968. Hippoglossina bollmani Gilbert.

Pacific Coast, off coast of Colombia.

Hippoglossina bollmani Gilbert, Proc. U. S. Nat. Mus. 1890, 122, off coast of Colombia at Albatross Station 2805, 7° 56′ N., 79° 41′ 30″ W., in 51½ fathoms.

Genus 1001. **XYSTREURYS** Jordan & Gilbert.

Xystreurys Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 34 (*liolepis*).

2969. Xystreurys liolepis Jordan & Gilbert.

Coast of California, from Point Conception southward.

Xystreurys liolepis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, p. 34, Santa Barbara, California.

Genus 1002. **PARALICHTHYS** Girard.

Paralichthys Girard, U. S. Pac. R. R. Surv., x, 146, 1858 (*californicus*).

2970. Paralichthys californicus (Ayres). *Bastard Halibut; Monterey Halibut.*

Coast of California, Tomales Bay to San Diego.

Hippoglossus californicus Ayres, Proc. Cal. Ac. Sci. 1859, 29, and 1860, fig. 10, San Francisco.

2971. Paralichthys brasiliensis (Ranzani).

South America, said to range northward to Guatemala.

Hippoglossus brasiliensis Ranzani, Nov. Spec. Pisc., 10, tab. III, 1840, Brazil.

2972. Paralichthys adspersus (Steindachner).

Pacific Coast of tropical America; Cape San Lucas to Peru.

Pseudorhombus adspersus Steindachner, Ichth. Notizen, v, 1867, 9, pl. 2, Chinchas Islands.

2973. Paralichthys woolmani Jordan & Williams.

Galapagos Islands.

Paralichthys woolmani Jordan & Williams, Proc. U. S. Nat. Mus. 1896, Galapagos Islands.

2974. Paralichthys dentatus (Linnæus). *Summer Flounder.*

Atlantic Coast of United States from Cape Cod to Florida.

Pleuronectes dentatus Linnæus, Syst. Nat., ed. XII, 1, 458, 1766, and of numerous copyists.

2975. Paralichthys lethostigma Jordan & Gilbert. *Southern Flounder.*

South Atlantic and Gulf coasts of United States, north to New York.

Paralichthys lethostigma Jordan & Gilbert, Proc. U. S. Nat. Mus. 1884, 237, Jacksonville, Florida.

2976. Paralichthys squamilentus Jordan & Gilbert.

South Atlantic and Gulf coasts of United States.

Paralichthys squamilentus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, p. 303, Pensacola, Florida.

2977. Paralichthys albigutta Jordan & Gilbert.

South Atlantic and Gulf coasts of United States.

Paralichthys albigutta Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 302, Pensacola; Beaufort.

eraspera mosani, Illustr.

~~Hypoglossodes hamulla~~

Ramulana dendritica. n.g.

2978. Paralichthys oblongus (Mitchill). *Four-spotted Flounder.*
Coasts of New England and New York.
Pleuronectes oblongus Mitchill, Trans. Lit. and Philos. Soc., 1, 1815, 391, New York.

2979. Paralichthys æstuarius Gilbert & Scofield.
Upper part of Gulf of California.
Paralichthys æstuarius Gilbert & Scofield MS., 1896, near mouth of Colorado River.

Genus 1003. ANCYLOPSETTA Gill.
Ancylopsetta Gill, Proc. Ac. Nat. Sci. Phila. 1864, 224 (*quadrocellata*).

2980. Ancylopsetta dendritica Gilbert.
Gulf of California.
Ancylopsetta dendritica Gilbert, Proc. U. S. Nat. Mus. 1890, 121, Gulf of California, at Albatross Station 3022, 30° 58′ 30″ N., 113° 17′ 15″ W., in 11 fathoms.

2981. Ancylopsetta quadrocellata Gill.
South Atlantic and Gulf coasts of United States.
Ancylopsetta quadrocellata Gill, Proc. Ac. Nat. Sci. Phila. 1864, 224, Pensacola (not *Platessa quadrocellata* Storer).

Genus 1004. NOTOSEMA Goode & Bean.
Notosema Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 193, 1883 (*dilecta*).

2982. Notosema dilectum (Goode & Bean).
Gulf Stream.
Notosema dilecta Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 193, 1883, Gulf Stream, off coast of South Carolina.

Genus 1005. GASTROPSETTA B. A. Bean.
Gastropsetta B. A. Bean, Proc. U. S. Nat. Mus. 1894, 633 (*frontalis*).

2983. Gastropsetta frontalis B. A. Bean.
Key West and Apalachicola, Florida.
Gastropsetta frontalis B. A. Bean, Proc. U. S. Nat. Mus. 1894, 633, Key West and Apalachicola, at Albatross Stations 2317 and 2373, in 45 fathoms.

Genus 1006. BOTHUS Rafinesque.
Bothus Rafinesque, Carratteri di Alcuni Nuovi Gen., 23, 1810 (*Bothus rumolo* Rafinesque = *Pleuronectes rhombus* Linnæus).

Subgenus LOPHOPSETTA Gill.
Lophopsetta Gill, Proc. U. S. Nat. Mus. 1888, 603 (*maculatus*).

2984. Bothus maculatus (Mitchill).
Atlantic Coast of United States, from Cape Cod to South Carolina.
Pleuronectes maculatus Mitchill, Rept. Fish. N. Y., 9, 1814, New York.

Genus 1007. TRICHOPSETTA Gill.
Trichopsetta Gill, Proc. U. S. Nat. Mus. 1888, 603 (*ventralis*).

2985. Trichopsetta ventralis (Goode & Bean).
Gulf of Mexico, in deep water.
Citharichthys ventralis Goode & Bean, Proc. U. S. Nat. Mus. 1885, 592, Gulf of Mexico, at Albatross Station 2386, 29° 15′ N., 88° 6′ W., in 60 fathoms.

Genus 1008. ENGYOPHRYS Jordan & Bollman.
Engyophrys Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 176 (*sancti-laurentii*).

2986. Engyophrys sancti-laurentii Jordan & Bollman.
Pacific Ocean, off coast of Colombia.
Engyophrys sancti-laurentii Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 176, Pacific Coast, off coast of Colombia, at Albatross Stations 2795, 7° 57′ N., 78° 55′ W., and 2805, 7° 56′ N., 79° 41′ 30″ W., in 33 and 51 fathoms.

Genus 1009. LIOGLOSSINA Gilbert.

Lioglossina Gilbert, Proc. U. S. Nat. Mus. 1890, 122 (*tetrophthalmus*).

2987. Lioglossina tetrophthalmus Gilbert.

Gulf of California.

Lioglossina tetrophthalmus Gilbert, Proc. U. S. Nat. Mus. 1890, 122, Gulf of California, at Albatross Stations 3014 and 3016, in 29 and 76 fathoms.

Genus 1010. AZEVIA Jordan & Goss.

Azevia Jordan & Goss, Review Flounders and Soles, Rept. U. S. Fish Com 1886 (1889), 271 (*panamensis*).

2988. Azevia panamensis (Steindachner).

Pacific Coast of Central America.

Citharichthys panamensis Steindachner, Ichth. Beitr., III, 62, 1875, Panama.

2989. Azevia querna Jordan & Bollman. = Cyclopsetta

Pacific Coast of America, off coast of Colombia.

Azevia querna Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 174, off Colombia, at Albatross Stations 2800, 8° 51′ N., 79° 31′ 30″ W., in 7 fathoms and 2802, 8° 38′ N., 79° 31′ 30″ W., in 16 fathoms.

Genus 1011. CYCLOPSETTA Gill.

Cyclopsetta Gill, Proc. U. S. Nat. Mus. 1888, 601 (*fimbriata*).

2990. Cyclopsetta chittendeni B. A. Bean.

Trinidad Island.

Cyclopsetta chittendeni B. A. Bean, Proc. U. S. Nat. Mus. 1894, 635, fig. 2, Trinidad Island.

2991. Cyclopsetta fimbriata (Goode & Bean.)

Deep waters of the Gulf of Mexico.

Hemirhombus fimbriata Goode & Bean, Proc. U. S. Nat. Mus. 1885, 591, deep waters of Gulf of Mexico.

Genus 1012. CITHARICHTHYS Bleeker.

Citharichthys Bleeker, Comptes Rendus Acad. Sci. Amsterd., XIII, Pleuron., 6, 1862 (*cayennensis*=*spilopterus*).

2992. Citharichthys sordidus (Girard).

Pacific Coast of North America, in water of moderate depth from British Columbia to Lower California.

Psettichthys sordidus Girard, Proc. Ac. Nat. Sci. Phila., VII, 1854, 142, San Francisco.

2993. Citharichthys fragilis Gilbert.

Gulf of California.

Citharichthys fragilis Gilbert, Proc. U. S. Nat. Mus. 1890, 120, Gulf of California, at Albatross Stations 3011, 3016, 3017, and 3033, in 18 to 76 fathoms.

2994. Citharichthys xanthostigma Gilbert.

Magdalena Bay, west coast of Lower California, and in Gulf of California.

Citharichthys xanthostigma Gilbert, Proc. U. S. Nat. Mus. 1890, 120, west coast of Lower California in Magdalena Bay, and in the Gulf of California, at Albatross Stations 3039, 3013, and 3044, in 47 to 74 fathoms.

2995. Citharichthys stigmæus Jordan & Gilbert.

Coast of southern California.

Citharichthys stigmæus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1882, 410, 411, Santa Barbara, California.

2996. Citharichthys dinoceros Goode & Bean.

Deep waters of Gulf of Mexico.

Citharichthys dinoceros Goode & Bean, Bull. Mus. Comp. Zool., XII, No. 5, 157, 1886, off Martinique, St. Lucie, and Barbados.

2997. Citharichthys arctifrons Goode.

Deep waters of Gulf Stream.

Citharichthys arctifrons Goode, Proc. U. S. Nat. Mus. 1880, 341, 472, Gulf Stream, off southern New England Coast.

Cyclopoetta quema.

Elropus microstomus

2998. Citharichthys unicornis Goode.

Deep waters of the Gulf Stream.

Citharichthys unicornis Goode, Proc. U. S. Nat. Mus. 1880, 342, Gulf Stream, southeast of New England.

2999. Citharichthys macrops Dresel.

South Atlantic and Gulf coasts of United States.

Citharichthys macrops Dresel, Proc. U. S. N. M. 1884, 539, Pensacola, Florida.

3000. Citharichthys uhleri Jordan & Evermann.

West Indies.

Citharichthys uhleri Jordan & Evermann, Fishes North and Middle America, 1896, West Indies.

3001. Citharichthys spilopterus Günther.

Both coasts of tropical America, north to New Jersey and Mazatlan.

Citharichthys spilopterus Günther, Cat., IV, 1862, 421, Bahia; New Orleans; San Domingo; Jamaica.

3002. Citharichthys gilberti Jenkins & Evermann.

Pacific Coast of tropical America, from Gulf of California to Panama.

Citharichthys gilberti Jenkins & Evermann, Proc. U. S. Nat. Mus. 1888, 157, Guaymas, Mexico.

3003. Citharichthys microstomus Gill.

Gulf of Mexico.

Citharichthys microstomus Gill, Proc. Ac. Nat. Sci. Phila. 1864, 223, Beesley Point, New Jersey.

Genus 1013. ETROPUS Jordan & Gilbert.

Etropus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 364 (*crossotus*).

3004. Etropus crossotus Jordan & Gilbert.

Tropical America, on both coasts, north to Guaymas, Mexico, and Cape Hatteras, North Carolina.

Etropus crossotus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 364, Mazatlan.

3005. Etropus rimosus Goode & Bean.

Gulf of Mexico.

Etropus rimosus Goode & Bean, Proc. U. S. Nat. Mus., VIII, 1885, 593, Gulf of Mexico, at Albatross Station 2408, 28° 28′ N., 84° 25′ W., in 210 fathoms.

Genus 1014. MONOLENE Goode.

Monolene Goode, Proc. U. S. Nat. Mus. 1880, 338 (*sessilicauda*).

3006. Monolene sessilicauda Goode.

Deep waters of the Gulf Stream.

Monolene sessilicauda Goode, Proc. U. S. Nat. Mus. 1880, pp. 337, 338, deep water south of New England.

3007. Monolene atrimana Goode & Bean.

Deep water of the Caribbean Sea.

Monolene atrimana Goode & Bean, Bull. Mus. Comp. Zool., XII, 155, 1886, deep water off Barbados.

Genus 1015. PLEURONICHTHYS Girard.

Pleuronichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 139 (*cœnosus*).

3008. Pleuronichthys decurrens Jordan & Gilbert.

Pacific Coast of United States, south to Monterey.

Pleuronichthys decurrens Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 453, San Francisco; Monterey Bay.

3009. Pleuronichthys verticalis Jordan & Gilbert.

Coast of California, in deep water.

Pleuronichthys verticalis Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 49, San Francisco.

3010. Pleuronichthys cœnosus Girard.

Alaska, southward to San Diego; most common about Puget Sound.

Pleuronichthys cœnosus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 139, San Francisco.

Genus 1016. HYPSOPSETTA Gill.

Hypsopsetta Gill, Proc. Ac. Nat. Sci. Phila. 1864, 195 (*guttulatus*).

3011. Hypsopsetta guttulata (Girard). *Diamond Flounder.*

Coast of California, Cape Mendocino to Magdalena Bay.
Pleuronichthys guttulatus Girard, Proc. Ac. Nat. Sci. Phila. 1856, 137, probably Tomales Bay, California.

Genus 1017. PAROPHRYS Girard.

Parophrys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 139 (*vetulus*).

3012. Parophrys vetulus Girard.

Pacific Coast of North America, Alaska to Santa Barbara.
Parophrys vetulus Girard, Proc. Ac. Nat. Sci. Phila. 1854, 140, California.

Genus 1018. INOPSETTA Jordan & Goss.

Inopsetta Jordan & Goss, in Jordan, Cat. Fishes N. A., 136, 1885 (*ischyrus*).

3013. Inopsetta ischyra (Jordan & Gilbert).

Puget Sound, probably northward to Alaska.
Parophrys ischyrus Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 276 and 453, Puget Sound.

Genus 1019. ISOPSETTA Lockington.

Isopsetta Lockington, in Jordan & Gilbert, Synopsis, 832, 1883 (*isolepis*).

3014. Isopsetta isolepis (Lockington).

Puget Sound to Point Conception, in rather deep water.
Lepidopsetta isolepis Lockington, Proc. U. S. N. M. 1880, 325, San Francisco.

Genus 1020. LEPIDOPSETTA Gill.

Lepidopsetta Gill, Proc. Ac. Nat. Sci. Phila. 1864, 195 (*umbrosus*).

3015. Lepidopsetta bilineata (Ayres).

Pacific Coast of North America, Alaska to Monterey.
Platessa bilineata Ayres, Proc. Cal. Ac. Sci. 1855, 40, San Francisco.

Genus 1021. LIMANDA Gottsche.

Limanda Gottsche, Wiegmann's Archiv 1835, 100 (*limanda*).

3016. Limanda ferruginea (Storer).

Atlantic Coast of North America, Labrador to New York.
Platessa ferruginea Storer, Fishes Massachusetts, 141, pl. 2, 1839, Cape Ann.

3017. Limanda proboscidea Gilbert.

Bristol and Herendeen bays, Alaska.
Limanda proboscidea Gilbert, Rept. U. S. F. C. 1893 (1896), 460, Bristol Bay, Alaska, at Albatross Stations 3239, 3240, and 3248, in 11 to 21 fathoms.

3018. Limanda aspera Pallas.

Coasts of Alaska and Kamchatka.
Pleuronectes asper Pallas, Zoogr. Rosso-Asiat., III, 425, 1811, east coast of Siberia.

3019. Limanda beani Goode.

Deep water, off coast of New England.
Limanda beani Goode, Proc. U. S. Nat. Mus. 1880, 473, southern coast of New England.

Genus 1022. PSEUDOPLEURONECTES Bleeker.

Pseudopleuronectes Bleeker, Compt. Rend. Ac. Amst., Pleur., 7, 1862 (*planus*).

3020. Pseudopleuronectes americanus (Walbaum). *Common Flatfish or Winter Flounder.*

Atlantic Coast of North America, from Labrador to Cape Lookout.
Pleuronectes americanus Walbaum, Artedi Piscium, 113, 1792, Long Island; based on the "Flounder" of Schöpf.

3021. Pseudopleuronectes pinnifasciatus (Kner).

Sea of Kamchatka, Decastris Bay.
Pleuronectes pinnifasciatus Kner, in Steindachner, Ueber einige Pleuronectiden, etc., aus Decastris Bay, 2, pl. 1, fig. 1, 1870, Decastris Bay.

Lepiotopsella umbrosa.

Leiopelta obscura Hergenroeder
Hemp.

Pansias
~~Agelbia~~ taeniopterae. n.g.

Genus 1023. PLEURONECTES (Artedi) Linnæus.

Pleuronectes (Artedi) Linnæus, Syst. Nat., ed. x, 268, 1758 (includes all flounders).

3022. Pleuronectes quadrituberculatus Pallas.

Coasts of Alaska and Kamchatka.

Pleuronectes quadrituberculatus Pallas, Zoogr. Rosso-Asiat., III, 423, 1811, sea between Kamchatka and Alaska.

Genus 1024. LIOPSETTA Gill.

Liopsetta Gill, Proc. Ac. Nat. Sci. Phila. 1864, 217 (*glaber*).

3023. Liopsetta putnami (Gill).

Atlantic Coast of North America, from Cape Cod northward to Labrador and beyond.

Euchalorodus putnami Gill, Proc. Ac. Nat. Sci. Phila. 1864, 216–221, Salem, Massachusetts.

3024. Liopsetta glacialis (Pallas).

Arctic Ocean, south to St. Michaels.

Pleuronectes glacialis Pallas, Itin., III, App., 706, 1776, mouth of river Obi.

Genus 1025. PLATOPHRYS Swainson.

Platophrys Swainson, Nat. Hist. Classn. Fishes, etc., II, 302, 1839 (*ocellatus*).

3025. Platophrys spinosus (Poey).

West Indies.

Rhomboidichthys spinosus Poey, Synopsis, 409, 1868, Cuba.

3026. Platophrys tæniopterus Gilbert.

Gulf of California and western coast of Lower California.

Platophrys tæniopterus Gilbert, Proc. U. S. Nat. Mus. 1890, 118, Gulf of California and coast of Lower California.

3027. Platophrys constellatus Jordan & Evermann.

Galapagos Archipelago.

Platophrys constellatus Jordan & Evermann, Fishes North and Middle America, 1896, Galapagos Islands.

3028. Platophrys ocellatus Swainson.

Tropical America; sandy shores from Long Island to Rio Janeiro.

Platophrys ocellatus Swainson, Nat. Hist. Classn. Fishes, II, 302, 1839, no locality given.

3029. Platophrys maculifer (Poey).

West Indies.

Pleuronectes maculiferus Poey, Memorias, II, 316, 1860, Cienfuegos, Cuba.

3030. Platophrys ellipticus (Poey).

West Indies.

Pleuronectes ellipticus Poey, Memorias, II, 315, 1860, Cuba.

3031. Platophrys lunatus (Linnæus).

West Indies.

Pleuronectes lunatus Linnæus, Syst. Nat., ed. x, 269, 1758; based on Catesby, and of the various copyists.

3032. Platophrys leopardinus (Günther).

Gulf of California.

Rhomboidichthys leopardinus Günther, Cat., IV, 434, 1862, locality unknown.

Genus 1026. SYACIUM Ranzani.

Syacium Ranzani, Nov. Spec. Pisc., Dis. Sec. 1840, 20 (*micrurum*).

3033. Syacium papillosum (Linnæus).

West Indies.

Pleuronectes papillosus Linnæus, Syst. Nat., ed. x, 271, 1758; based on Marcgrave, and of the earlier copyists.

3034. Syacium latifrons (Jordan & Gilbert).
Pacific Coast of tropical America; Panama.
Citharichthys latifrons Jordan & Gilbert, Bull. U. S. F. C. 1881, 334, Panama.

3035. Syacium ovale (Günther).
Pacific Coast of Tropical America, Mazatlan to Panama.
Hemirhombus ovalis Günther, Proc. Zool. Soc. Lond. 1864, 154, Panama.

3036. Syacium micrurum Ranzani.
West Indies; Key West to Rio Janeiro.
Syacium micrurum Ranzani, Nov. Spec. Pisc. Disc. Sec., 1840, 20, pl. 5, Brazil.

Genus 1027. PLATICHTHYS Girard.
Platichthys Girard, Proc. Ac. Nat. Sci. Phila. 1854, 136 (*rugosus* = *stellatus*).

3037. Platichthys stellatus Pallas. *California Flounder.*
Pacific Coast of America, from Point Conception to the Arctic Ocean, and south to Sakhalin.
Pleuronectes stellatus Pallas, Zoogr. Rosso-Asiat., III, 416, 1811, Alaska.

Genus 1028. EMBASSICHTHYS Jordan & Evermann.
Embassichthys Jordan & Evermann, Fishes N. and M. Amer., 1896 (*bathybius*).

3038. Embassichthys bathybius (Gilbert).
Coast of California south of Point Conception.
Cynicoglossus bathybius Gilbert, Proc. U. S. Nat. Mus. 1890, 123, Santa Barbara Channel, at Albatross Station 2980, in 603 fathoms.

Genus 1029. MICROSTOMUS Gottsche.
Microstomus Gottsche, Wiegmann's Archiv 1835, 150 (*latidens*); not *Microstoma* Risso, 1826.

3039. Microstomus kitt (Walbaum). *Smear Dab.*
Arctic Europe, west to the sea between Greenland and Iceland.
Pleuronectes kitt Walbaum, Artedi Piscium, III, 120, 1792, after Ray; the description in part confused with that of *Lepidorhombus*.

3040. Microstomus pacificus (Lockington).
Pacific Coast of North America, Monterey to Vancouver Island, and probably northward.
Glyptocephalus pacificus Lockington, Rept. Cal. Com. Fisheries 1878–79, 43, off Point Reyes, California.

Genus 1030. GLYPTOCEPHALUS Gottsche.
Glyptocephalus Gottsche, Wiegmann's Arch. 1835, 156 (*saxicola* = *cynoglossus*).

3041. Glyptocephalus cynoglossus (Linnæus).
North Atlantic, chiefly in deep water, south to Cape Cod and France.
Pleuronectes cynoglossus Linnæus, Syst. Nat., ed. x, 269, 1758; after Gronow.

3042. Glyptocephalus zachirus Lockington.
Deep waters of the Northern Pacific; thus far known only from about San Francisco.
Glyptocephalus zachirus Lockington, Proc. U. S. Nat. Mus. 1879, 88, San Francisco.

Family CCXXIV. SOLEIDÆ. The Soles.

Genus 1031. ACHIRUS Lacépède.
Achirus Lacépède, Hist. Nat. Poiss., IV, 659, 1803 (*fasciatus*, etc.).

3043. Achirus achirus (Linnæus).
Atlantic coasts of tropical America.
Pleuronectes achirus Linnæus, Sys. Nat., ed. x, 268, 1758; based on Gronow.

3044. Achirus inscriptus Gosse.
West Indies, north to Key West.
Achirus inscriptus Gosse, Nat. Sojourn Jamaica, 52, pl. 1, fig. 4, 1851, Jamaica.

3034. Syacium latifrons (Jordan & Gilbert).
Pacific Coast of tropical America; Panama.
Citharichthys latifrons Jordan & Gilbert, Bull. U. S. F. C. 1881, 334, Panama.

3035. Syacium ovale (Günther).
Pacific Coast of Tropical America, Mazatlan to Panama.
Hemirhombus ovalis Günther, Proc. Zool. Soc. Lond. 1864, 154, Panama.

3036. Syacium micrurum Ranzani.
West Indies; Key West to Rio Janeiro.
Syacium micrurum Ranzani, Nov. Spec. Pisc. Disc. Sec., 1840, 20, pl. 5, Brazil.

Genus 1027. PLATICHTHYS Girard.
Platichthys Girard, Proc. Ac. Nat. Sci. Philad. 1854, 136 (*rugosus*=*stellatus*).

3037. Platichthys stellatus Pallas. *California Flounder.*
Pacific Coast of America, from Point Conception to the Arctic Ocean, and south to Sakhalin.
Pleuronectes stellatus Pallas, Zoogr. Rosso-Asiat., III, 416, 1811, Alaska.

Genus 1028. EMBASSICHTHYS Jordan & Evermann.
Embassichthys Jordan & Evermann, Fishes N. and M. Amer., 1896 (*bathybius*).

3038. Embassichthys bathybius (Gilbert).
Coast of California south of Point Conception.
Cynicoglossus bathybius Gilbert, Proc. U. S. Nat. Mus. 1890, 123, Santa Barbara Channel, at Albatross Station 2980, in 603 fathoms.

Genus 1029. MICROSTOMUS Gottsche.
Microstomus Gottsche, Wiegmann's Archiv 1835, 150 (*latidens*); not *Microstoma* Risso, 1826.

3039. Microstomus kitt (Walbaum). *Smear Dab.*
Arctic Europe, west to the sea between Greenland and Iceland.
Pleuronectes kitt Walbaum, Artedi Piscium, III, 120, 1792, after Ray; the description in part confused with that of *Lepidorhombus*.

3040. Microstomus pacificus (Lockington).
Pacific Coast of North America, Monterey to Vancouver Island, and probably northward.
Glyptocephalus pacificus Lockington, Rept. Cal. Com. Fisheries 1878–79, 43, off Point Reyes, California.

Genus 1030. GLYPTOCEPHALUS Gottsche.
Glyptocephalus Gottsche, Wiegmann's Arch. 1835, 156 (*saxicola*=*cynoglossus*).

3041. Glyptocephalus cynoglossus (Linnæus).
North Atlantic, chiefly in deep water, south to Cape Cod and France.
Pleuronectes cynoglossus Linnæus, Syst. Nat., ed. x, 269, 1758; after Gronow.

3042. Glyptocephalus zachirus Lockington.
Deep waters of the Northern Pacific; thus far known only from about San Francisco.
Glyptocephalus zachirus Lockington, Proc. U. S. Nat. Mus. 1879, 88, San Francisco.

Family CCXXIV. SOLEIDÆ. The Soles.

Genus 1031. ACHIRUS Lacépède.
Achirus Lacépède, Hist. Nat. Poiss., IV, 659, 1803 (*fasciatus*, etc.).

3043. Achirus achirus (Linnæus).
Atlantic coasts of tropical America.
Pleuronectes achirus Linnæus, Sys. Nat., ed. x, 268, 1758; based on Gronow.

3044. Achirus inscriptus Gosse.
West Indies, north to Key West.
Achirus inscriptus Gosse, Nat. Sojourn Jamaica, 52, pl. 1, fig. 4, 1851, Jamaica.

3045. Achirus klunzingeri (Steindachner).

Pacific Coast of tropical America, Panama to Guayaquil.

Solea klunzingeri Steindachner, Zur Fische des Cauca und der Flusse bei Guayaquil, 44, 1879, Guayaquil, Ecuador.

3046. Achirus lineatus (Linnæus).

West Indies, Key West and Egmont Key to Uruguay.

Pleuronectes lineatus Linnæus, Syst. Nat., ed. x, 268, 1758; based on Brown & Sloane; not of ed. xii, which is *Achirus fasciatus*.

3047. Achirus mazatlanus (Steindachner). *Mexican Sole; Teipalcate.*

Pacific Coast of tropical America.

Solea mazatlana Steindachner, Ichth. Notizen, ix, 23, 1869, Mazatlan.

3048. Achirus fonsecensis (Günther).

Pacific Coast of tropical America, Mazatlan to Fonseca.

Solea fonsecensis Günther, Cat., iv, 475, 1862, Gulf of Fonseca.

3049. Achirus fischeri (Steindachner).

Pacific coast of Isthmus of Panama.

Solea fischeri Steindachner, Beitr. Kenntniss Flus-Fische Sud-Amer., 13, 1879, Rio Mamone, near Panama.

3050. Achirus scutum (Günther).

Pacific Coast of Central America.

Solea scutum Günther, Cat., iv, 474, 1862, Gulf of Fonseca, Panama.

3051. Achirus fimbriata (Günther).

Gulf of Fonseca.

Solea fimbriata Günther, Cat., iv, 477, 1862, Gulf of Fonseca.

3052. Achirus fasciatus Lacépède. *American Sole; Hog-choker.*

Atlantic Coast of United States, from Cape Cod to Texas; often ascending streams.

Achirus fasciatus Lacépède, Hist. Nat. Poiss., iv, 659, 662, 1803, Charleston, S. C.; description based entirely on the Linnæan account of the fish sent by Garden.

3053. Achirus panamensis (Steindachner).

Pacific Coast of Tropical America, Panama.

Solea panamensis Steindachner, Ichth. Beitr., v, 10, pl. 2, 1876, Panama.

Genus 1032. APIONICHTHYS Kaup.

Apionichthys Kaup, in Wiegmann's Archiv 1858, 104 (*dumerili*).

3054. Apionichthys unicolor (Günther).

West Indies.

Soleotalpa unicolor Günther, Cat., iv, 1862, 489, West Indies.

Genus 1033. SYMPHURUS Rafinesque.

Symphurus Rafinesque, Indice d' Ittiologia Siciliana, 52, 1810 (*nigrescens*).

3055. Symphurus marginatus (Goode & Bean).

West Indies.

Aphoristia marginata Goode & Bean, Bull. Mus. Comp. Zool., x, No. 5, 153, 1883, off St. Vincent, etc.

3056. Symphurus atramentatus Jordan & Bollman.

Off coast of Colombia.

Symphurus atramentatus Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 177, off coast of Colombia, at Albatross Station 2795, 7° 57′ N., 78° 55′ W., in 33 fathoms.

3057. Symphurus elongatus (Günther).

Pacific Coast of tropical America.

Aphoristia ornata var. *elongata* Günther, Fishes Cent. Am., 473, 1869, Panama.

3058. Symphurus leei Jordan & Bollman.

Off the coast of Colombia.

Symphurus leei Jordan & Bollman, Proc. U. S. Nat. Mus. 1889, 178, off coast of Colombia, at Albatross Station 2804, 8° 16′ 30′ N., 79° 37′ 45″ W., in 47 fathoms.

3059. Symphurus atricauda (Jordan & Gilbert).

Lower California, north to San Diego.

Aphoristia atricauda Jordan & Gilbert, Proc. U. S. Nat. Mus. 1880, 23, San Diego, California.

3060. Symphurus plagusia (Bloch & Schneider). *Acedia.*

West Indies, south to Rio Janeiro.

Pleuronectes plagusia Bloch & Schneider, Syst. Ichthyol., 162, 1801; after Brown.

3061. Symphurus plagiusa (Linnæus). *Tongue-fish.*

South Atlantic and Gulf coasts of United States.

Pleuronectes plagiusa Linnæus, Syst. Nat., ed. XII, 455, 1766, on a specimen from Dr. Garden, probably from Charleston, but the locality not quite certain.

3062. Symphurus diomedeana (Goode & Bean).

Gulf of Mexico, off Key West, Florida.

Aphoristia diomedeana Goode & Bean, Proc. U. S. Nat. Mus. 1885, 589, off Key West, Florida, at Albatross Station 2414, 25° 4′ 30″ N., 83° 21′ 15″ W., in 24 fathoms.

3063. Symphurus pusillus (Goode & Bean).

Off Atlantic Coast of United States, in deep water.

Aphoristia pusilla Goode & Bean, Proc. U. S. Nat. Mus. 1885, 590, Gulf Stream, at 40° 7′ 48″ N., 70° 45′ 54″ W., and 40° 1′ N., 69° 56′ W.

3064. Symphurus piger (Goode & Bean).

West Indies and Gulf of Mexico, in deep water.

Aphoristia pigra Goode & Bean, Bull. Mus. Comp. Zool., XIII, No. 5, 154, 1886, St. Kitts, Key West, and Cedar Keys, in about 250 fathoms.

3065. Symphurus nebulosus (Goode & Bean).

Gulf Stream.

Aphoristia nebulosa Goode & Bean, Bull. Mus. Comp. Zool., XII, 192, 1883, Gulf Stream, off the coast of California.

3066. Symphurus williamsi Jordan & Starks.

West coast of Mexico.

Symphurus williamsi Jordan & Starks, in Jordan, Fishes Sinaloa, 506, 1895, Mazatlan, Sinaloa.

3067. Symphurus fasciolaris Gilbert.

Gulf of California.

Symphurus fasciolaris Gilbert, Proc. U. S. N. M. 1891, 566, Gulf of California.

Order DD. PEDICULATI. The Pediculate Fishes.

Family CCXXV. LOPHIIDÆ. The Fishing Frogs.

Genus 1034. LOPHIUS (Artedi) Linnæus. *Fishing-Frogs.*

Lophius (Artedi) Linnæus, Syst. Nat., ed. XII, 402, 1766 (*piscatorius*).

3068. Lophius piscatorius Linnæus. *Fishing-frog; Monk-fish; Goose-fish; Angler; All-mouth; Bellows-fish.*

North Atlantic, on both coasts.

Lophius piscatorius Linnæus, Syst. Nat., ed. XII, 402, 1766, no locality given.

Genus 1035. LOPHIOMUS Gill.

Lophiomus Gill, Proc. U. S. Nat. Mus. 1882, 552 (*setigerus*).

3069. Lophiomus ~~setigerus Wahlen~~berg.

Coasts of China and Japan.

Lophius setigerus Wahlenberg, Skrivt. Naturh., IV, 214, tab. 3, figs. 5 and 6.

Lophiodes Gruder Beau
prior to Chirolophius

Lophiomis albiscopus,
Coast of [illegible]

P. gibbus Mitchill
81.

Histrio fischer, Zoognosia = Cat
(pinnato Plesiophrynae?) 75, 1813. Schneider?

A. nuttingi Garman
Iowa. 83. Gt Bahama Banks

A. radcesius Garman 85 Key West.

A. principis Cuvier.

corallinus = multiocellatus

[illegible] gibbus.

Chaenax nuttingi Garman
86 Sand Key Light

Family CCXXVI. ANTENNARIIDÆ.

Histrio seems to have proved

Genus 1036. PTEROPHRYNE Gill.

Pterophryne Gill, Proc. Ac. Nat. Sci. Phila. 1863, 90 (*histrio*).

3070. Pterophryne histrio (Linnæus).

Tropical parts of the Atlantic; abundant on our Gulf Coast and occasional southward.

Lophius histrio Linnæus, Syst Nat., ed. x, 237, 1758, in the open sea.

Genus 1037. ANTENNARIUS Lacépède. Commerson'

Antennarius Lacépède, Hist. Nat. Poiss., I, 421, 1798 (*chironectes*).

3071. Antennarius sanguineus Gill.

Cape San Lucas, Lower California.

Antennarius sanguineus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 91, Cape San Lucas, Lower California.

3072. Antennarius strigatus Gill.

Cape San Lucas, Lower California.

Antennarius strigatus Gill, Proc. Ac. Nat. Sci. Phila. 1863, 92, Cape San Lucas, Lower California.

3073. Antennarius scaber (Cuvier).

Caribbean Sea; Port Castries; St. Lucia.

Chironectes scaber Cuvier, Mém. Mus., III, 425, pl. 16, fig. 2.

3074. Antennarius reticularis Gilbert.

Gulf of California.

Antennarius reticularis Gilbert, Proc. U. S. Nat. Mus. 1891, 566, Gulf of California, at Albatross Station 2825, in 7 fathoms.

3075. Antennarius multiocellatus (Cuvier & Valenciennes).

Garden Key, Florida, to Martinique.

Chironectes multiocellatus Cuvier & Valenciennes, Hist. Nat. Poiss., 422, 1837, Martinique.

3076. Antennarius tigris Poey.

Cuba.

Chironectes tigris Poey, Memorias, I, 217, pl. 17, fig. 2, 1851, Cuba.

3077. Antennarius inops Poey.

West Indies.

Antennarius inops Poey, Ann. Sci. Nat. Madrid 1874, Puerto Rico.

3078. Antennarius corallinus Poey. *Martin Pescador.*

Cuba.

Antennarius corallinus Poey, Repertorio, I, 188, 1865, Havana.

3079. Antennarius tenebrosus (Poey).

Cuba.

Chironectes tenebrosus Poey, Memorias, I, 219, pl. 17, fig. 1, 1851, Cuba.

3080. Antennarius ocellatus (Bloch & Schneider).

Pensacola, Florida.

Lophius ocellatus Bloch & Schneider, Syst. Ichth., 142, 1801.

3081. Antennarius sonnatagii (Müller).

Gulf of Mexico.

Chironectes sonnatagii Müller, Reisen in Mexico, etc., I, 180, 1864, north of the Bahamas.

Genus 1038. CHAUNAX Lowe.

Chaunax Lowe, Trans. Zool. Soc. Lond., III, 1846, 339 (*pictus*).

3082. Chaunax pictus Lowe.

Madeira and off the coast of Rhode Island.

Chaunax pictus Lowe, Trans. Zool. Soc. Lond. 1846, 339, Camera de Lobos.

Family CCXXVII. CERATIIDÆ.

Genus 1039. CERATIAS Kröyer.

Ceratias Kröyer, Naturhist. Tidsskrift, 2 Række, I, 1844, 639 (*holbölli*).

3083. Ceratias holbolli Kröyer.

Greenland.

Ceratias holbölli Kröyer, Naturh. Tidsskrift 1844, 639, Greenland.

Genus 1040. MANCALIAS Gill.

Mancalias Gill, Proc. U. S. Nat. Mus., I, 1878, 227 (*uranoscopus*).

3084. Mancalias uranoscopus (Murray).

Deep seas; taken at Madeira and off the coast of southern New England.

Ceratias uranoscopus Murray, in Wyville Thompson, The Atlantic, II, 67, 1878, off Madeira.

3085. Mancalias shufeldti (Gill).

Western Atlantic.

Typhlopsaras shufeldti Gill, Forest and Stream, November 8, 1883, 284, western Atlantic.

Genus 1041. CRYPTOPSARAS Gill.

Cryptopsaras Gill, Forest and Stream, November 8, 1883 (*couesii*).

3086. Cryptopsaras couesii Gill.

Gulf Stream.

Cryptopsaras couesii Gill, Forest and Stream, November 8, 1883, 284, Gulf Stream, at Albatross Station 2101.

Genus 1042. ONEIRODES Lütken.

Oneirodes Lütken, Overs. Kong. Dansk. Vidensk. Selsk. Forhandl. 1871, 56 (*eschrichtii*).

3087. Oneirodes eschrichti Lütken.

Deep sea, off Greenland.

Oneirodes eschrichti Lütken, Dansk. Vidensk. Selsk. Forh. 1871, 57, Greenland.

Genus 1043. HIMANTOLOPHUS Reinhardt.

Himantolophus Reinhardt, Dansk. Vid. Selsk. Nat. 1837, 74 (*grœnlandicus*).

3088. Himantolophus grœnlandicus Reinhardt.

Greenland.

Himantolophus grœnlandicus Reinhardt, Dansk. Vidensk. Selsk. Nat. Math. Afh., 1837, 74, Greenland.

Genus 1044. CORYNOLOPHUS Gill.

Corynolophus Gill, Proc. U. S. Nat. Mus. 1878, 219 (*reinhardti*).

3089. Corynolophus reinhardti (Lütken).

Greenland.

Himantolophus reinhardti Lütken, Dansk. Vid. Selsk. 1878, 321, Greenland.

Genus 1045. LINOPHRYNE Collett.

Linophryne Collett, Proc. Zool. Soc. Lond. 1886, 138 (*lucifer*).

3090. Linophryne lucifer Collett.

Open Atlantic.

Linophryne lucifer Collett, Proc. Zool. Soc. Lond. 1886, 138, pl. 15, off Madeira, lat. 36° N., long. 20° W.

Genus 1046. LIOCETUS Günther.

Liocetus Günther, Challenger Rept., XXII, 57, 1887 (*murrayi*).

3091. Liocetus murrayi Günther.

Mid-Atlantic at Challenger Stations 106 and 348.

Melanocetus (*Liocetus*) *murrayi* Günther, Challenger Rept., XXII, 57, pl. 11, fig. A, 1887, mid-Atlantic.

Agocephalus radiatus Mitchell.

H. caribbaeus Garman,
Iowa Lab. 87, 1896
Jam to Barbados.

Genus 1047. CAULOPHRYNE Goode & Bean.

Caulophryne Goode & Bean, Oceanic Ichth., 496, 1896 (*jordani*).

3092. Caulophryne jordani Goode & Bean.

Atlantic Coast, off New Jersey.

Caulophryne jordani Goode & Bean, Ocean. Ichth., 496, fig. 409, 1896, Gulf Stream, at 39° 27′ N., 71° 15′ W., in 1,276 fathoms.

Family CCXXVIII. OGCOCEPHALIDÆ. The Bat-Fishes.

Genus 1048. OGCOCEPHALUS Fischer.

Ogcocephalus Fischer, Zoognosia, 78, 1813 (*vespertilio*).

3093. Ogcocephalus vespertilio (Linnæus).

West Indies, north to Carolina.

Lophius vespertilio Linnæus, Syst. Nat., ed. XII, 402, 1766, American coast of Atlantic Ocean.

Genus 1049. ZALIEUTES Jordan & Evermann.

Zalieutes Jordan & Evermann, Fishes North and Middle America, 1896 (*elater*).

3094. Zalieutes elater (Jordan & Gilbert).

West coast of Mexico.

Malthe elater Jordan & Gilbert, Proc. U. S. Nat. Mus. 1881, 365, Mazatlan, Mexico.

Genus 1050. HALIEUTICHTHYS Poey.

Halieutichthys Poey, in Gill, Proc. Ac. Nat. Sci. Phila. 1863, 89 (*reticulatus*).

3095. Halieutichthys aculeatus (Mitchill).

Cuba to southern Florida.

Lophius aculeatus Mitchill, Amer. Month. Mag. 1818, 325, Straits of Bahama.

Genus 1051. HALIEUTÆA Cuvier & Valenciennes.

Halieutæa Cuvier & Valenciennes, Hist. Nat. Poiss., XII, 455, 1837 (*stellatus*).

3096. Halieutæa spongiosa Gilbert.

Pacific Ocean, off Lower California.

Halieutæa spongiosa Gilbert, Proc. U. S. Nat. Mus. 1890, 124, at Albatross Station 2992, 18° 17′ 30″ N., 114° 43′ 15″ W., in 460 fathoms.

Genus 1052. HALIEUTELLA Goode & Bean.

Halieutella Goode & Bean, Proc. Biol. Soc. Wash. 1882 (1885), 88 (*lappa*).

3097. Halieutella lappa Goode & Bean.

Gulf Stream.

Halieutella lappa Goode & Bean, Proc. Biol. Soc. Wash. 1882 (1885), 88, Gulf Stream, at Fish Hawk Station 1151, 39° 58′ 30″ N., 70° 37′ W., in 125, fathoms.

Genus 1053. DIBRANCHUS Peters.

Dibranchus Peters, Monatsb. König. Preuss. Ak. Wiss., Berlin, 1875 (1876), 736 (*atlanticus*).

3098. Dibranchus atlanticus Peters.

Gulf Stream.

Dibranchus atlanticus Peters, Monatsberichte König. Preuss. Ak. Wiss. Berlin, 1875 (1876), 736, 10° 12′ 9″ N., 17° 25′ 5″ W., coast of west Africa.

INTRODUCED SPECIES.

Family CYPRINIDÆ.

1. **Cyprinus carpio** Linnæus. *Carp; German Carp.*

Fresh waters of Asia, but introduced into Europe and America as a food-fish. It has been extensively introduced into private ponds in nearly all parts of the United States. From the ponds it has escaped into the streams and lakes, and is now an abundant fish in most of our larger, warmer rivers and in the ponds and bayous of the Mississippi Valley, on the south shore of Lake Erie, in the lower Columbia River, and in many other places.

Cyprinus carpio Linnæus, Syst. Nat., ed. x, 320, 1758.

2. **Carassius auratus** (Linnæus). *Goldfish.*

Native to China and Japan, but introduced everywhere as an aquarium fish and now naturalized in many of the streams in the eastern United States.

Cyprinus auratus Linnæus, Syst. Nat., ed. x, 323, 1758.

3. **Tinca tinca** (Linnæus). *Tench.*

Native in Europe. Introduced into the United States, but not yet well established anywhere.

Cyprinus tinca Linnæus, Syst. Nat., ed. x, 321, 1758, "habitat in Europæ stagnis lacubus."

4. **Idus idus** (Linnæus). *Golden Ide.*

Native in Europe. Introduced into the United States, but it has not yet become well established.

Cyprinus idus Linnæus, Syst. Nat., ed. x, 324, 1758, fresh waters of Europe.

Family SALMONIDÆ.

5. **Salmo trutta levenensis** (Walker). *Loch Leven Trout.*

Loch Leven, in Fifeshire, and other lochs in the south of Scotland and north of England. Introduced by the U. S. Fish Commission into Shoshone Lake, in the Yellowstone National Park, and elsewhere.

Salmo levenensis Walker, Wernerian Memoirs, I, 541, 1808.

6. **Salmo fario** Linnæus. *Von Behr Trout; Brown Trout.*

Northern Europe. Introduced into the waters of Yellowstone Park and elsewhere.

Salmo fario Linnæus, Syst. Nat., ed. x, 309, 1758, "habitat in Sveciæ, Helvetiæ fluviis."

ADDENDUM.

The following species were inadvertently omitted from the foregoing list:

740½. **Stolephorus scofieldi** Jordan & Culver.

Mazatlan, west coast of Mexico.

Stolephorus scofieldi Jordan & Culver, Fishes of Sinaloa, 410, 1895, Mazatlan.

1999½. **Nexilaris concolor** (Gill).

Panama.

Euschistodus concolor Gill, Proc. Ac. Nat. Sci. Phila., 1862, 145, Panama.

This is a valid species, the type of the genus *Nexilaris* Gilbert MS., distinguished by the adnate preopercle.

LIST OF COMMON NAMES OF FISHES OCCURRING IN CHECK-LIST.

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Genera of Rafinesque, m - monotypic,

Carcharias 10. taurus m Odontaspis

Dalatias 10 esparophagus, ? Scymnus = Centrophorus

noctuvius {type} = Centrophorus or Squalus

Tetrorax 11 angiova, m ? ~~Scymnus~~ Centrophorus

Isurus 11 oxyrhynchus, m. ISURUS

Cerretius 12 macrourus m. false

Alopias 12 macrourus m VULPECULA

NEPTRANCHIAS 13. cinereus m NEPTRANCHIAS.

Galeus 13 melastomus m Proteinus

Squalus 13 uyato (not type) SQUALUS

Heptanchus 14 griseus m. HEPTANCHUS

Etmopterus 14 aculeatus m ETMOPTERUS

Rhina 15 squatina m. Rhina.

Leobatis 16 panduratus m. Rhinobatis

Dipturus 16 batis L. m. RAJA

Dasyatis 16 rajo m - DASYBATIS

Orthragus 17 {lunaris} MOLA.

Diplanchias 17 oblongus MOLA

Mola 17. mola L. m. MOLA

Tiphle 18 tiphle m TYPHLE

Siphostoma 18 acuta, Syngnathus

Oxyurus 19. vermiformis : 2

Swanmans list. recent species.
Proc. Phil. Rept (F.C.) Bull. F.C.

Alosa ohienis Ev, Rep. 27. 227. 1901 (2)
Notropis brimleyi B. Rem. Falls of Ohio. Proc. 26. 1903. 913
Notemigonus gilberti J+E. Proc. Cape R. N.C. 11. 188 351
Notropis chalybaeus abbotti Jordan. Roanoke. Phil. 56. 1904 239
Ceratichthys micros Jordan. Batsto R. N.J. Phil. 63. 1911 200
Cosmus Inlet. Cape May.
Notropis kennicotti Jordan. Phil. 60. 1908. 533
Allegany R. Pot Allegany
Aromatichthys taylori Gilbert.
Alopichthys novae caesariensis Jordan Phil Nanaimo
64. 1912. 36
Lepomis Beesley's Point.
glabrus. Aegaeuca N.J.
Antennarius telephanus Jordan. Phil. 64. 1912
38. Cosmus Inlet Cape May.
Lethotremus macalpini Jordan Phil.
66. 1914. 360. Ulvaches Bay. Ecuador
Lethotremus armouri Jordan. 363. Esperanza
Rhinichthys bowersi Goldborough + Clark
Bull. 27. 1907. 36
Dog Fork. Herman W. Va.
Pseudopleuronectes dignabilis Kendall
Bull. 30. 392. 1916 Georges Bank.
Notropis hellarius. Radcliffe + Welch.
Bull. 32. 1912. 31 Swan Cr. Ind.
Ingyrosomus evensis J+E
Proc. 1909. 165. Pt. Stanley
" hirondinis. p. 167 " "
" zemelinis. 167. Dutch
Chaetodon brevirostris Jordan. Bull
17. 1887. 152 Lord's Hole.
Sebastes ungulatus Jordan
Falls of Ohio.
Lutjanus chrysopterus J+E. Bull
17. 1887. 174. Rockefeller collection

Alutera monoceros.
Woods Holl. Acc Smith
Bull. 18. 273. 1898

Poecilopsis edwardsi Eigenmann
Bull. 21. 1901 [illegible]
30 miles S. of Newfoundland

Leuciscus carlton Kendall
Bull. 22, 1902. 257.
E. Penobscot R. Maine l.c. 260

Ceratichthys annulus
Between Omaha & Cross L. Neb.

Coregonus stanleyi Kend. l.c. place also

Leuciscus evermanni Jordan
Bull. 24, 1904. 226.
Boulder Creek Colo.

Triglopsis antarcticus Jordan & Evermann
Proc. 88. 1910. 75. off Toronto.

Triglops ommatistus (vice pungelii)
Gilbert. Proc. 44. 1913. Elements
terrae novae - same Newf

Ethmolamia anderanubei Ev.
Rept. 1899. 367
d. maxentucheus

Hadropterus maxentucheus
Ev. - same

Notropis chrosatus Cockerell

Notropis atherinoides.

Carcharhinus. Car. Dentibus magnis, triangularibus, saepius serratis; Insp. nullis; P. S. 2, 1ª. dorsali; P. A. parva; fossulâ semilunari ad radicem sup. et inf. P. C. bilobatae, lobo sup. multum longiore et pinnâ speciali terminato.

Spec. Commersonii; Lamia; Lividus; Ustus; Heterodon; Verus; Broussonetii; Glaucus; Caeruleus; Megalops; Heterobranchialis; Cornubicus; Monensis? Vulpes.

[Prodrome d'une nouvelle distribution systématique du Règne animal, par M. H. de Blainville.

Bull. des Sciences, par la Société Philomatique de Paris, 1816, p. 121.

Livraison d'août.

quadrifasciatus is Doubleday's female
boscanius with dorsal horn free.

Examined two types of Lonchopisthus
deeper body, longer tail, shorter and much
broader maxillary than Gnathypops,
about 2/3 the broad eye, at its tip. Scales rather
large.

Type of Neolamprologus atlanticus from Gudbout
Quebec. 1st D sp. as long as head. V fish 1 3/4.

Head 4 3/4

Montague [illegible] has low Dorsal.
with [illegible] 6th sp.

Lumpen[illegible]

Jordan & Evermann
A check-list of the fishes and fish-like
vertebrates of north and middle America

137747

NAME	DATE	NAME	DATE
[illegible]	[illegible]		